

SIGACCESS FY'12 Annual Report
July 2011 - June 2012
Submitted by: Andrew Sears, Chair

SIGACCESS continues to refine its activities to meet member needs. This report highlights SIGACCESS Awards as well as the SIG's conference, publication, and other activities.

Awards

ACM Student Research Competition (SRC)

SIGACCESS continues to conduct this competition in conjunction with the ASSETS conference. For ASSETS 2011, the winners are:

Graduate Awards:

1st place: Brandon Shrewsbury with "Providing Haptic Feedback Using The Kinect"

2nd place: Sanjana Prasain with "StopFinder: Improving the Experience of Blind Public Transit Riders with Crowdsourcing"

3rd place: Victoria E. Hribar with "The TaskTracker: Assistive Technology for Task Completion"

Undergraduate Awards:

1st place: Rolf Black with "The PhonicStick – A Joystick to Generate Novel Words Using Phonics"

2nd place: Ha Trinh with "Using a Computer Intervention to Support Phonological Awareness Development of Nonspeaking Adults"

3rd place: Markus Guentert with "Improving Public Transit Accessibility for Blind Riders: A Train Station Navigation Assistant"

SIGACCESS Best Paper Award

David R. Flatla and Carl Gutwin. 2011. Improving calibration time and accuracy for situation-specific models of color differentiation. In The proceedings of the 13th international ACM SIGACCESS conference on Computers and accessibility (ASSETS '11). ACM, New York, NY, USA, 195-202. DOI=10.1145/2049536.2049572 <http://doi.acm.org/10.1145/2049536.2049572>

SIGACCESS Best Student Paper Award

João Oliveira, Tiago Guerreiro, Hugo Nicolau, Joaquim Jorge, and Daniel Gonçalves. 2011. Blind people and mobile touch-based text-entry: acknowledging the need for different flavors. In The proceedings of the 13th international ACM SIGACCESS conference on Computers and accessibility (ASSETS '11). ACM, New York, NY, USA, 179-186. DOI=10.1145/2049536.2049569 <http://doi.acm.org/10.1145/2049536.2049569>

SIGACCESS Scholarship in Computers and Accessibility

The SIGACCESS Scholarship Award aims to provide support for participation in the ASSETS conference for individuals who would not otherwise be able to attend. Practitioners, researchers, members of advocacy groups, or individuals with disabilities are eligible to apply. Applicants must have a demonstrated interest in accessible computing. Awardees will have the opportunity to actively participate in the ASSETS conference and gain experience and knowledge from interacting with experts in the field. The scholarship award is in the amount of \$2,000. SIGACCESS awards up to two scholarships per year, pending availability of funds. The 2011 scholarships were awarded to Heather Markham and Willam Li to attend ASSETS 2011.

Supporting ACM-W Scholarships

Beginning with ASSETS 2010, SIGACCESS now supports the ACM-W Scholarship program by providing a complimentary registration to ACM-W Scholarship recipients. For ASSETS 2011,

SIGACCESS hosted Sanjana Prassain, University of Washington, who was also a participant in the ASSETS '11 ACM SRC.

Significant Programs **ASSETS Conference**

ASSETS'11 was held in Dundee, Scotland. Once again, conference attendance exceeded projections, with over 145 attendees. Consistent with recent history, submissions for the technical program were received from numerous countries and accepted papers covered a wide variety of topics.

Once again, the conference featured an NSF sponsored Doctoral Consortium (see http://www.sigaccess.org/community/newsletter/january_2012/jan_2012.pdf). This consortium allowed doctoral students to present their dissertation topics and receive feedback during formative stages of their work. The conference also hosted a Microsoft Student Research Competition (SRC) event (see information about the winners of the competition above).

The SIGACCESS Business Meeting, held at ASSETS, updated attendees on SIG activities and discussed ideas for new activities. We continued discussions regarding supporting workshops or other smaller events that were more focused with regard to topic or geographical location.

ASSETS offers a mentoring program to authors who are new to the conference as well as authors who are new to presenting research or are submitting work to a new category. Authors who are not familiar with preparing papers in English can also seek assistance. Mentors are experienced ASSETS authors, providing advice to the prospective authors about how their work may fit with the conference and how to effectively present their ideas. Normally, mentoring does not include detailed copyediting. This year the mentoring program received 12 requests. To provide some context, the conference normally receives approximately 100 full paper submissions.

ACM Transactions on Accessible Computing The inaugural issue of the *ACM Transactions on Accessible Computing (TACCESS)* appeared in May, 2008. Volume one included three issues, with volumes two and three both including the full set of four issues. The number of submissions continues to grow. TACCESS is a quarterly journal that publishes refereed articles addressing issues of computing as it impacts the lives of people with disabilities. It provides a technical forum for disseminating innovative research related to computing technologies and their use by people with disabilities.

The SIGACCESS newsletter continues with its regular online publications: see <http://www.sigaccess.org/community/newsletter/>. Jinjuan Feng (Towson University) has served as the Newsletter Editor since June, 2010.

Also available on the SIGACCESS website is the periodic 'Left Field' column (see http://www.sigaccess.org/community/left_field/), which is now produced by Marko Vigo of the University of Manchester. The goal of Left Field is to bring to the attention of members publications from the ACM Digital Library that are of interest, but published in venues typically outside the reading of SIGACCESS members.

SIGACCESS Website

The SIGACCESS website was created and maintained by the SIGACCESS webmaster, Jeffrey Bigham (University of Rochester). The SIGACCESS web site provides information about the SIG's activities including awards and conferences as well as a repository of dissertations and theses, our newsletter, the "Left Field" column, writing guidelines, and other resources which may be of value to the community.

Innovative programs

SIGACCESS has developed several resources which are made available to the community at large via the SIGACCESS web site. The first is a set of writing guidelines which reflect current thinking on

language for writing in the academic accessibility community. Certain words or phrases can (intentionally or unintentionally) reflect bias or negative, disparaging, or patronizing attitudes toward people with disabilities and in fact any identifiable group of people. Choosing language that is neutral, accurate, and represents the preference of the groups to which it refers can convey respect and integrity. The second resource is a guide for planning accessible conferences. This document contains information for organizers of academic conferences who wish to make their events as accessible as possible, so that people with disabilities can participate fully.

SIGACCESS is pleased to be supporting a workshop that will be held in conjunction with the upcoming ECRC event in 2013 in Paris.

Key Issues

Moving forward, there are a number of issues that SIGACCESS must address including developing future leaders for the community and continuing our efforts to reach new audiences. The SIG is actively engaged in developing leaders, recruiting new members of the community to participate both in the conference organizing committee and in other SIG activities. To reach new audiences, and become a more international organization, the SIG arranged for ASSETS to be held in Europe. We were pleased that ASSETS 2011 received numerous submissions and had very strong attendance. We will be considering the possibility of holding ASSETS outside of the US more frequently.

SIGACCESS just held a successful election with a full slate of candidates. The current Chair and Secretary/Treasurer were re-elected and Clayton Lewis of the University of Colorado was elected to serve as the Vice Chair starting in July. We thank Enrico Pontelli of New Mexico State University for his service as Vice Chair of SIGACCESS for the previous three years.

SIGACT FY'12 Annual Report
July 2011 - June 2012
Submitted by: Lance Fortnow, Past Chair

1. Awards

- 2012 Gödel Prize awarded jointly to
 - Elias Koutsoupias and Christos H. Papadimitriou: Worst-case equilibria, *Computer Science Review*, 3(2): 65-69, 2009.
 - Tim Roughgarden and Éva Tardos: How Bad Is Selfish Routing?, *Journal of the ACM*, 49(2): 236-259, 2002.
 - Noam Nisan and Amir Ronen: Algorithmic Mechanism Design, *Games and Economic Behavior* 35: 166-196, 2001.
 - The prize is awarded jointly with the EATCS and this year was awarded at the 2012 ICALP conference.
- 2012 SIGACT Distinguished Service Prize: Sampath Kannan
- STOC 2012 Best Paper Award: "Linear vs. Semidefinite Extended Formulations: Exponential Separation and Strong Lower Bounds" by Samuel Fiorini, Serge Massar, Sebastian Pokutta, Hans Raj and Ronald de Wolf, and "The Cell Probe Complexity of Dynamic Range Counting," by Kasper Green Larsen.
- Danny Lewin Best Student Paper Award (STOC 2012): "The Cell Probe Complexity of Dynamic Range Counting," by Kasper Green Larsen
- SIGACT awarded twenty-five student travel awards to allow these students to attend the 2011 STOC conference.
- Moving forward, both the Distinguished Service prize and the Knuth Prize (joint with IEEE TC-MFCS) will be awarded annually.

2. Significant papers on new areas published in proceedings

With help from PC Chairs Shafi Goldwasser (ITCS), Toni Pitassi (STOC), Yuval Rabani (SODA) and Nachum Dershowitz (LICS).

STOC 2012

The ACM Symposium on Theory of Computing (STOC 2012) is one of the flagship conferences for theoretical computer science, bringing together researchers from a variety of different subfields.

Kasper Green Larsen won the STOC 2012 best student paper award, and co-won the STOC 2012 best paper award for his paper, "The Cell Probe Complexity of Dynamic Range Counting." In this paper, Larsen solved a longstanding and fundamental open problem in data structures by obtaining a superlogarithmic lower bound on the update time and query time of dynamic data structures in the cell probe model.

Fiorini, Massar, Pokutta, Tiwary and deWolf co-won the STOC 2012 best paper award for their paper, "Linear versus Semidefinite Extended Formulations: Exponential Separations and Strong Lower Bounds." In their paper, they solve a twenty year old problem posed by Yannakakis and prove that there is no polynomial-size linear program whose associated polytope projects to the travelling salesman polytope. Their proof makes a beautiful connection between quantum communication protocols and semidefinite programming reformulations of linear programs.

SODA 2012

The ACM-SIAM Annual Symposium on Discrete Algorithms (SODA 2012) is a major conference that focuses on algorithms and discrete mathematics.

The best paper award of SODA 2012 went to the paper titled "computing all maps into a sphere" by Martin Čadek, Marek Krčál, Jiří Matoušek, Francis Sergeraert, Lukáš Vokřínek and Uli Wagner. The paper presents pioneering work in computational algebraic topology. In particular, the main result is an algorithm for computing homotopy classes of maps between simplicial complexes satisfying certain connectedness conditions. There are very simple homotopy problems that are undecidable, and therefore the computational complexity of problems in this area hasn't received much attention in the past. The techniques may bear potential implications in the study of embeddings of simplicial complexes.

The best student paper award went to the paper titled "near linear time $O(\epsilon)$ approximation for restricted shortest paths in undirected graphs" by Aaron Bernstein. The paper considers the following NP-hard problem: given an undirected graph with edge costs and delays, two nodes s, t , and a threshold T , find a minimum cost s - t path, subject to its delay being upper bounded by T . The near linear time approximation algorithm improves the running time of previous algorithms. The improvement is achieved at the cost of violating both the optimum cost of the path and the delay threshold by a factor arbitrarily close to 1, using randomness, and restricting the result to the undirected case only. The techniques use several ideas from previous work to compute an emulator graph where the desired path can be found by considering emulator paths using a small number of edges.

The paper titled "using hashing to solve the dictionary problem" by John Iacono and Mihai Patrascu designs an external memory dictionary data structure that beats buffer trees by violating the indivisibility assumption under which buffer trees are an optimal construction for this problem. The indivisibility assumption is often used to show lower bounds for external memory data structures, so this result indicates a direction for overcoming a common obstacle to obtaining better I/O-efficient data structures. This is one of the last conference papers that Mihai, who passed away this June, published. It is a wonderful example of his remarkable legacy of ground-breaking work on data structures. Let us remember his stellar and sadly short career.

ITCS 2012

The third Innovations in Theory of Computer Science conference (ITCS12) was held at MIT, Jan 7-Jan 10, 2012. This was the first year the meeting was sponsored by SIGACT. The program consisted of 39 papers, selected from 98 submissions, by the 13 program committee members.

A few novelties were introduced into the program. The first was a new role for session chairs. Each session started with a ten minute introduction by the session chair who summarized the contributions and significance of each paper to appear in the forthcoming session. These introductions were wonderful and gave both context for the works to be presented and insight into the session chairs view of the field and the program committees selection process.

The second was an event titled "Graduating Bits". This session invited anyone on the job market this year, including finishing graduate students and post-docs alike, to give a brief (2-5 minute presentation) of who they are and what they work on. Given that ITCS is being held in January prior to interview season, this seems an ideal time to meet the young members of our community.

The session was well attended and full of enthusiastic energy. Hopefully, this will turn into an ITCS annual tradition. Finally, instead of a business meeting, the program included a special community evening bonding event following a banquet buffet. The event was playback theatre performance by the "Boston Playback Company" who were joined by two actors from our community, Omer Reingold and Nir Shavit. Playback theatre is a form of improv theatre in which members of the

audience tell stories that are then improvised back to them by the troupe. The show included several spectacular stories by ITCS attendees about moments of innovation, inspiration, immigration, and paper acceptance and rejection. Kudos to Omer and Nir!

The best student paper award was given to Andrew Drucker from MIT on his paper "High Confidence Predictions under Adversarial Uncertainty". The paper studies how an observer of an infinite unknown binary sequence generated by an adversary, can make a single successful prediction about the upcoming elements in the sequence, for example predicting that the next bit or predicting the frequency of 1's in an upcoming finite subsequence. There is no time limit on when this prediction must be made, but the prediction should be correct with high probability (e.g. Drucker shows how to predict that the next bit will be 0, with error probability arbitrarily close to the lim-inf of the frequency of 1's in the sequence.). The model applies to situations in which an action should be performed in a fixed duration, and one needs to predict a "safe" time-interval to perform it.

A special issue for the conference will be published in the ACM Transactions on Computation Theory with a selection of papers in varied areas from coding theory to learning theory to quantum complexity theory to cryptography and more. We mention a few of the invited papers across several sub-disciplines of TOC.

"Linear Time Decoding of Regular Expander Codes" by Michael Viderman gives a new linear time combinatorial algorithm to decode the Sipser-Spielman expander codes for graphs with better expansion parameters than the previous linear time algorithms. The paper introduces a new belief-propagation style algorithm which works in two-stages: find "Erasures", that is, identify a small set of nodes that contains all the corrupted nodes and declare all nodes in this set are erasures. Second, decode while relying only on the recognized (subset of the) uncorrupted nodes which were not declared as erasures.

"Noise vs. Computational Intractability in Dynamics" by Mark Braverman, Alexander Grigo, and Cristobal Rojas.

This paper gives a novel positive answer to the classical question of whether we can predict (in principle or even efficiently) the behavior of evolving dynamical systems. The classical answers have been negative due both to Turing uncomputability arguments as such evolving systems are themselves powerful computers and to the fact that the precision required about the input will be too high. In a fascinating twist, this paper argues that uncomputability is not robust to noise. It proves that (In the case of finite dimensional, continuous systems) if the evolving system is itself subject to some noise at each step, then the precision of the initial state can be overcome and the long-term statistical behavior of the resulting system can not only be computable but even efficiently computable.

"Quantum Rejection Sampling" by Maris Ozols, Martin Roetteler, and Jeremie Roland.

This paper studies a quantum analog of the classical re-sampling problem introduced by von Neuman: how to generate samples from a distribution q given the ability to sample from another distribution p . The authors define the quantum analogue, where from access to an oracle that encodes the distribution p by a coherent superposition of unknown states with some amplitudes, one should have a coherent superposition of the same unknown states with different target amplitudes encoding the distribution q . The paper shows a tight characterization of the query complexity of this quantum resampling problem in terms of the distance between the two states and using a semidefinite programming analysis. Finally, this new tool is shown useful to a variety of quantum algorithms, including a solution of the hidden shift problem which yields Grover's algorithm as a special case.

"(Leveled) Fully Homomorphic Encryption without Bootstrapping" by Zvika Brakerski, Craig Gentry, and Vinod Vaikuntanathan.

In a fully homomorphic encryption scheme (FHE), given encrypted data it is possible to perform arbitrary computations on that data while it remains encrypted and without knowing the secret decryption key. All prior FHEs construct as a first step a "somewhat homomorphic" encryption

scheme (SWE) which is capable of evaluating “low-degree” polynomials homomorphically, and is latter bootstrapped on to obtain a full FHE. The ciphertexts in all these schemes are “noisy”, with a noise that grows slightly during homomorphic addition and dramatically during homomorphic multiplication so that eventually correct decryption is no longer possible and hence, the limitation of low-degree polynomials. The new paper shows a new noise-management technique that keeps the noise level essentially constant, reducing it after every homomorphic operations by switching to a new smaller moduli in each operation. This increases the number of multiplicative levels that can be evaluated by an exponential factor. One of the benefits of the technique is that security can now be proved based on lattice problems with quasi-polynomial approximation factors rather than sub-exponential factors as in all previous schemes.

"Distribution Free Evolvability of Polynomial Functions over all convex loss functions" by Paul Valiant.

This paper introduces an extension of L. Valiant's model of evolvability to real-valued functions, possibly the more natural way to describe many biological processes and proves two significant results about the new model. The first result shows that if one can weakly optimize every function in a certain class of functions relative to some loss function then that class is evolvable with that loss function. The second result gives an evolution algorithm for evolving linear functions (or low degree polynomials) with quadratic loss:: at every step the current function adjusts the current parameters in a random and uniform direction on a randomly chosen scale. Surprisingly, this simple method yields a strong evolvability result.

LICS 2012

Logic in Computer Science was for the first time co-sponsored by SIGACT.

The award for best all-student paper is given at LICS in honor of Stephen Kleene, and went this year to Christoph Berkholz of Humboldt-Universität zu Berlin for his paper on "Lower bounds for existential pebble games and k-consistency tests", which provides a polynomial lower bound on determining the winner of an existential k-pebble game (for k-variable existential-positive first-order sentences) on finite relational structures. Berkholz gave a very nice presentation, as well.

Another excellent paper related to constraint satisfaction problems was "Near unanimity constraints have bounded pathwidth duality", by Libor Barto, Marcin Kozik, and Ross Willard. They showed that constraint satisfaction for a finite relational structure with near-unanimity polymorphism as its fixed template has bounded-pathwidth duality, making the problem nondeterministic logspace.

Another highly-appreciated paper was by André Platzer on "The complete proof theory of hybrid systems", showing the proof-theoretic equivalence of discrete and continuous dynamical properties of hybrid systems. Platzer also gave a half-day tutorial on the broader subject of verification of continuous dynamical algorithms, surveying the use of a version of dynamic logic that incorporates the use of differential invariants for the dynamic properties of such systems.

3. Significant programs that provided a springboard for further technical efforts

SIGACT sponsored or co-sponsored a number of important conferences including the Symposium on Theory of Computation (STOC), Symposium on Principles of Distributed Computing (PODC), Symposium on Computational Geometry (SoCG), Symposium on Parallel Algorithms and Architectures (SPAA), and Symposium on Discrete Algorithms (SODA). In 2012 SIGACT had two new sponsorships: Innovations in Theoretical Computer Science (ITCS) and 50% of Logic in Computer Science (LICS).

SIGACT also supports several conferences in-cooperation including Symposium on Principles of Database Systems (PODS), Symposium on Foundations of Computer Science (FOCS) and Symposium on Principles of Programming Languages (POPL) .

4. Innovative programs which provide service to our technical community

The Committee for the Advancement of Theoretical Computer Science (CATCS) sponsored by SIGACT continues to be very active. The committee meets by conference call every month and has developed and executed action plans to increase the visibility of theoretical computer science and to increase the funding base for theory of computation at the NSF. The Committee helps advise the NSF CCF Director and other NSF officers on several matters including the state of funding in theoretical computer science and helping the NSF recruit for program managers and other positions.

The Simons Foundation has announced a new \$6mil/year Center for the Theory of Computing at Berkeley and also supports a number of researchers and postdocs. Many SIGACT members participate closely in these activities and SIGACT hopes to plan a major role in the Center's activities.

SIGACT continues to support student attendance at SODA and STOC by funding Student Best Paper Awards, travel, lunches, and reduced registration fees. This helps ensure that the maximum number of students can attend these conferences.

In 2011 STOC ran a successful poster session. STOC 2012 followed-up not only with another poster session but an open call for workshops and a new best student presentation award. STOC had 365 participants, the largest attendance since the early 90's.

In June 2012 the ACM held their Turing Centenary, a series of talks and panels featuring over thirty former ACM Turing award winners. SIGACT has been involved in the planning of this event from the beginning and was one of the co-sponsors.

5. Summary of key issues that the membership of the SIGACT will have to deal with in the next 2-3 years

Funding and articulating the importance of theoretical computer science are perennial issues that are being addressed by the Committee for the Advancement of Theoretical Computer Science (CATCS). Two major issues for theoretical computer science at the NSF: Lack of program directors in the core theory areas and a very high acceptance rate for theory proposals. This is in addition to the highly volatile budget situation for NSF in this political climate. Members of the theory community have been working directly with NSF officers to mitigate these issues.

The Symposium on Computation Geometry (SoCG), a conference co-sponsored by SIGACT, has many of its members unhappy with remaining part of the ACM. SIGACT and the ACM have been working closely to find ways to keep SoCG under the ACM umbrella but this is part of a larger movement where SIGACT and the ACM need to explain their role and advantages better in an increasingly changing conference landscape.

During the STOC business meeting Laszlo Babai made a well-received case for dramatically changing the ACM publishing model to allow more open access. SIGACT and the ACM need to find ways to balance their financial model, their digital library and the interests of the community to increase the availability of their research.

The academic job market has improved somewhat but the community still needs to help with employment of many of its members. The multiple postdocs that will come from the Simons Institute will put only more pressure on people moving from postdocs to permanent positions. We might see even larger numbers of our researchers doing multiple postdocs before landing in tenure track positions.

SIGAda FY'12 Annual Report
July 2011 - June 2012
Submitted by: Ricky E. Sward, Chair

SIGAda Awards

Started in 1994, the ACM SIGAda Awards recognize individuals and organizations that have made outstanding contributions to the Ada community and to SIGAda. The Outstanding Ada Community Contribution Award is given for broad, lasting contributions to Ada technology and usage. The Distinguished Service Award is given for exceptional contributions to SIGAda activities and products.

This year the Outstanding Ada Community Contribution Awards were awarded to Stephen Michell and Tullio Vardanega.

Stephen Michell - Member of the ISO/IEC JTC 1/SC 22/WG 9 and Ada Rapporteur Group (ARG). Frequent participant in the International Real-Time Ada Workshop (IRTAW). Involved with the Ada High Integrity Rapporteur Group (HRG). 18 citations for papers and works involving Ada. Currently the Canadian Head Of Delegation for WG23, Software Vulnerabilities.

Tullio Vardanega - Member of the ISO/IEC JTC 1/SC 22/WG 9 and Ada Rapporteur Group (ARG). Frequent participant in the International Real-Time Ada Workshop (IRTAW). Served as Editor-in-Chief of Ada-Europe's Ada User Journal (AUJ). Served on the Ada-Europe Board. Served as Program Co-Chair for four Ada-Europe conferences. Served as Conference Chair for a memorable conference. Served as president of Ada-Europe.

This year the Distinguished Service Award was awarded to Alok Srivastava.

Alok Srivastava - Editor, Ada Letters. Alok has done an outstanding job publishing three issues of Ada Letters each year, which is one of the key member benefits advertised by the SIGAda organization. Two time Conference Chair (2007 and 2010). The 2007 conference was the most financially successful conference in recent history. Vice Chair for Meetings and Conferences since 2009. He has done an outstanding job overseeing the organization of the SIGAda conferences for the past three years. He has also stepped in several times for the SIGAda Chair to run bi-weekly meetings and to attend ACM SIG Governing Board meetings.

Significant Papers published in proceedings

This year's conference included three outstanding keynote speeches. The keynote speakers presented on the following topics:

Grady Booch. IBM Fellow. Chief Scientist for Software Engineering, IBM Research.
Everything I Know I Learned from Ada

Martin Carlisle, Ph.D. US Air Force Academy. *Why I Came Back To Ada*

Jim Rogers. MEI Technologies, Inc. *Software Safety, and Related Language Considerations*

This year's conference included an outstanding panel session that was very well received by the attendees:

Panel: How to Make Ada Go "Viral". Chair: JP Rosen (AdaLog), with Brad Moore (General Dynamics Canada), David Sauvage (AdaLabs, Mauritius), Tucker Taft (Sofcheck)

There were several outstanding papers in the conference this year with equally outstanding presentations. For example:

Stack Safe Parallel Recursion with Paraffin by Brad Moore (General Dynamics, Canada)

Software Vulnerabilities Precluded by SPARK by Paul E. Black (National Institute of Standards and Technology), Chris E. Dupilka (US DoD), F. David Jones and Joyce Tokar (Pyrrhus Software)

Enhancing SPARK's Contract Checking Facilities Using Symbolic Execution by John Hatcliff, Jason Belt (Kansas State University), Patrice Chalin (Concordia University), David Hardin (Rockwell Collins Advanced Technology Center), and Xianghua Deng (Google, Inc.)

An Ada Design Pattern Recognition Tool for AADL Performance Analysis by V. Gaudel, F. Singhoff, A. Plantec, S. Rubini (University of Brest, France), P. Dissaux (Ellidiss Software), and J. Legrand (Ellidiss Software)

Overall, the papers being submitted to the SIGAda conference continue to be of high quality.

Significant Programs that provided a springboard for further technical efforts

A formal liaison exists between SIGAda and WG9. ISO/IEC JTC1/SC22 WG9 is that body of international representatives responsible for the maintenance and evolution of the Ada International Standard. The National Bodies represented on WG9 are Belgium, Canada, France, Germany, Italy, Japan, Switzerland, the United Kingdom, and the United States.

In March 2007 the ISO (the International Organization for Standardization) in Geneva, Switzerland announced the formal completion of the process to revise the Ada 95 language, with the publication of the Ada 2005 standard — officially named ISO/IEC 8652:1995/Amd 1:2007. This announcement culminates a collaborative international effort under ISO's Ada Working Group (WG9) to enhance the 1995 version of the Ada language.

At least one SIGAda Officer participates and represents the membership at the WG9 meetings held twice each year.

Innovative Programs which provide service to some part of our technical community

Since 1994 SIGAda has conducted an "Ada Awareness Initiative". Its centerpiece has been our SIGAda professional booth display unit in exhibition halls at important software engineering conferences. This lets folks know that Ada is very much alive and a sound part of any software engineering effort having real-time, high integrity, high-assurance, and highly distributed requirements. We brought the booth to the SIGCSE conference this year providing good visibility for SIGAda to the Computer Science educational community. We decided not to take the booth to the Software and Systems Technology Conference (SSTC) due to declining attendance at the conference.

Via this exhibiting, SIGAda sustains Ada visibility ("name recognition"), provides various Ada-advocacy materials and makes available Ada experts (our booth staff volunteers) who can intelligently answer questions, provide pointers and help, and debunk the misinformation about Ada that many attendees at these shows have. This program continues to be extremely successful and viewed as a highly important thrust by the SIGAda membership.

Summary of key issues to deal with in the next 2-3 years

One of the key issues for SIGAda is a proposed revision of the bylaws that includes a reorganization of the Executive Committee. There are currently six elected officers including the International Representative, who is elected by the Ada Europe members. Due to the size of SIGAda, we propose a smaller Executive Committee that consists of just four elected officers:

Chair, Vice Chair, Secretary/Treasurer, and International Representative. Since the International Representative will still be elected by Ada Europe members, this new organization includes only three officers that will be elected by the SIGAda membership. This simplifies the organization and eases the burden of finding willing candidates to fill the officer positions.

Another key issue is continuing to host a financially successful conference. Last year the conference in Denver had a surplus in revenues of \$9180.00. This reversed the trend of holding conferences that had a loss in revenues, and was we will strive to continue this trend. We will continue to encourage our SIGAda members to participate in and to attend the conference.

We decided to rename the SIGAda annual conference in order to focus on a niche in the safety critical, high integrity area of Computer Science. The SIGAda 2012 annual conference is called the High Integrity Language and Technology (HILT) conference. We already have confirmed that several well-known researchers in this area will attend and give keynote speeches, including Barbara Liskov, Nancy Leveson, and Guy Steele.

We will continue to publish three issues of the Ada Letters journal and seek participation in the form of contributing articles and papers.

SIGAPP FY'12 Annual Report
July 2011- June 2012
Submitted by: Sung Shin, Chair

The SIGAPP mission is to further the interests of the computing professionals engaged in the development of new computing applications and applications areas and the transfer of computing technology to new problem domains.

SIGAPP Officers

Chair - Sung Shin, South Dakota State University, USA
Vice Chair - Richard Chbeir, Bourgogne University, Dijon, France
Secretary – Eric Wong, University of Texas, USA
Treasurer - Lorie Liebrock, New Mexico Institute of Technology, USA
Web Master - Hisham Haddad, Kennesaw State University, USA
ACM Program Coordinator, Irene Frawley, ACM HQ

Status of SIGAPP

The main event that took place within SIGAPP for this year was the Symposium on Applied Computing (SAC) in Riva del Garda, Italy after taking place in Taichung, Taiwan in 2011. This year's SAC was very successful. More details about SAC will follow in the next section. We also supported several additional conferences with in-cooperation status. We have 10% co-sponsorship for two conferences. The first one, 2012 International Conference on Ubiquitous Information Management and Communication (ICUIMC) was held in Kuala Lumpur, Malaysia in February, 2012, and the 2012 Research on Applied Computing (RACs) will be held in San Antonio, Texas in October 2012. ICUIMC 2012 conference was successful, and it has been beneficial for SIGAPP. We will continue supporting those conferences in the coming year.

Three issues of ACR (Applied Computing Review) were published in FY 2011, and two issues were published in FY 2012. We have introduced it semi-annually in an electronic version only in FY 2011. It is now stabilized, and we have begun publishing quarterly electronically since spring of 2012. . Ultimately, we want ACR to appear in the SCI (Science Citation Index). ACR contains invited papers from world-renowned researchers and selected papers presented by prominent researchers and professionals who attended the Symposium on Applied Computing 2012 in Riva del Garda, Italy. The selected papers have been expanded, revised, and peer-reviewed again for publishing in ACR. The next issue will be published in fall of 2012. We plan to select good papers from two SIGAPP partially sponsored conferences, ICUIMC and RACs. We hope that ACR will serve as a platform for many new and promising ideas in the many fields of applied computing. It is strongly related to nearly every area of computer science, and we feel an obligation to serve the community as best we can. The papers in ACR represent the current applied computing research trends. These authors truly contribute to the state of the art in applied computing.

The Student Travel Award Program continues to be successful in assisting SIGAPP student members in attending conferences sponsored by or in-cooperation with SIGAPP. 32 students were granted awards to attend SAC 2012, representing 15 countries. Allocated budget of these awards was increased compared to the last year. We also implemented a Developing Countries Travel Award for researchers from developing countries who would otherwise have difficulty attending the SAC conference. For 2012, this award was used exclusively for students from developing countries but in 2012 and beyond, we also hope to support faculty-level researchers from such countries.

SIGAPP continues to have a stable membership. SIGAPP's and SAC's strength and uniqueness among ACM SIGs continues to be the opportunity for scientific diversity and crosscutting multiple disciplines within the ACM community. The officers look forward to continue working with the ACM SGB to further develop the SIG by increasing membership and developing a new journal on applied computing.

Status of SAC

The 27th Annual edition of SAC has marked another successful event for the Symposium on Applied Computing. This international gathering attracted over 389 attendees from over 61 countries. It was hosted and held on the conference center in Riva del Garda, Italy, March 2012. There was an open Call for Track Proposals and after prescreening the proposals, 34 Tracks were finally accepted for SAC 2012. The prescreening and selections were made based on the success of those Tracks in the previous SACs as well as targeting new and emerging areas. The Call for Papers for these Tracks attracted 1056 final paper submissions from 61 different countries. The submitted papers underwent the blind review process and 270 papers were finally accepted as full papers for inclusion in the Conference Proceedings and presentation during the Symposium. The final acceptance rate for SAC 2011 is 25.6% for the overall track. In addition to the accepted full papers, 76 papers that received high enough review scores were accepted as short papers for the Poster Program. The Monday Tutorials program offered 130 tutorials and attracted over 50 attendees. The program included coffee breaks and a social luncheon that took place on campus.

SAC 2013 will be held in and will be hosted by the University of Coimbra, Polytechnic Institute of Coimbra, I statute of Systems and Robotics, and University of Sao Paulo, Coimbra, Portugal, from March 17-21, 2013. The web site <http://www.acm.org/conferences/sac/sac2013/> has further details such as symposium committee, technical tracks, and track chairs.

SAC 2013 is being considered for Italy. A decision by the SAC steering will be made soon. To date, no 2014 SAC local host proposals have been submitted from the U.S.

Summary

1. Awards that were given out
Student Travel Awards - 32 awards granted, totaling \$28,270
2. Significant papers on new area that were published in proceedings - new track in SAC 2011 on Applied Biometrics..
3. Significant programs that provided a springboard for further technical efforts - SAC continues to have tracks that represent application areas which are not covered by other SIGs. SAC has always been open to new tracks in applied computing.
4. Innovative programs which provide service to some part of your technical community - expansion of Student Travel Award Program for SIGAPP student members, initiation of Developing Countries Travel Award Program for students and faculty.
5. A very brief summary for the key issues that the membership of that SIG will have to deal with in the next 2-3 years - continuation of awards and development of a refereed journal in Applied Computing

SIGARCH FY'12 Annual Report
July 2011 - June 2012
Submitted by: David Wood, Chair
Doug Burger, Past Chair

Overview

The primary mission of SIGARCH continues to be the forum where researchers and practitioners of computer architecture can exchange ideas. SIGARCH sponsors or cosponsors the premier conferences in the field as well as a number of workshops. It publishes a quarterly newsletter and the proceedings of several conferences. It is financially strong with a fund balance of over two million dollars. The SIGARCH bylaws are available online at http://www.acm.org/sigs/bylaws/arch_bylaws.html.

Officers and Directors

During the past fiscal year David Wood served as SIGARCH Chair, Sarita Adve served as Vice Chair, and Partha Ranganathan served as Secretary/Treasurer. Norm Jouppi, Kai Li, Scott Mahlke, and Per Stenstrom served on the Board of Directors, and Doug Burger also served as Past Chair. In addition to these elected positions, there are three appointed positions. Doug DeGroot continues to serve as the Editor of the SIGARCH newsletter Computer Architecture News. Kevin Lim replaced Nathan Binkert as the SIGARCH Information Director, providing SIGARCH information online. Rob Schreiber served as SIGARCH's liaison on the SC conference steering committee until May, then stepped down and was replaced by Mattan Erez.

Awards

The Eckert-Mauchly Award, cosponsored by the IEEE Computer Society, is the most prestigious award in computer architecture. SIGARCH endows its half of the award, which is presented annually at the Awards Banquet of ISCA. Algirdas Avizienis of the University of California, Los Angeles received the award in 2012, for 'For fundamental contributions to fault-tolerant computer architecture and computer arithmetic.' In 2009, SIGARCH petitioned ACM to increase the ACM share of the award to \$10,000, using an endowment taken from the SIGARCH fund balance, which ACM has approved. The increase will happen when IEEE approves a matching increase, which will increase the amount of the award to \$20,000.

SIGARCH has endowed the Maurice Wilkes Award, an award established to recognize computer architects early in their careers, named after one of the pioneers of computer architecture who began making significant contributions early in his career. The award is selected by a vote of the Executive Committee and Board of SIGARCH, from a list of nominees supplied by a three person nominating committee. Due to a potential conflict of interest, the nominating committee was expanded this year from three to five. The 2012 award went to David Brooks of Harvard University, for 'For outstanding contributions to power modeling, circuit and microarchitectural techniques to improve energy efficiency.'

SIGARCH also cosponsors, along with the IEEE-CS TCCA, the Influential ISCA Paper Award which is presented annually at the ISCA conference. This award recognizes the paper, presented at the ISCA conference 15 years previously, which has had the most impact on computer architecture. The eighth Influential ISCA Paper Award was presented to Subbarao Palacharla, Norman P. Jouppi, and James E. Smith for their paper "Complexity-Effective Superscalar Processors" which appeared in the proceedings of the 23rd ISCA (1997).

In 2009, SIGARCH and the ASPLOS co-sponsors (SIGPLAN and SIGOPS) approved the creation of an ASPLOS Best Paper Award, the first one of which was awarded in 2009. The Award is determined by a vote of the Program Committee, and announced at the conference. In 2012, the fourth ASPLOS Best Paper Award was awarded to Michael Ferdman, Almutaz Adileh, Onur

Kocberber, Stavros Volos, Mohammad Alisafae, Djordje Jevdjic, Cansu Kaynak, Adrian Popescu, Anastasia Ailamaki, and Babak Falsafi for their paper 'Clearing the Clouds: A Study of Emerging Workloads on Modern Hardware'.

Starting in 2011, ASPLOS began awarding an 'Influential Paper Award,' modeled after the award presented at ISCA. The ASPLOS Influential Paper Award is awarded to any paper published in ASPLOS conferences ten or more conferences prior to the conference in which the award is being made. Unfortunately, due to a lack of oversight, the organizing committee for ASPLOS 2012 failed to select a recipient for this award in 2012.

In 2007 the ACM Awards Committee approved the establishment of the SIGARCH Distinguished Service Award, for 'important service to the Computer Architecture community.' Nominations are due each year by February 15th, and can be sent to the SIGARCH Secretary/Treasurer at any time. No award was given this year, but the committee expects to have several nominees next year that meet the selection criteria.

SIGARCH is a co-sponsor of the Ken Kennedy Award, founded in 2009. The ACM-IEEE CS Ken Kennedy Award is awarded annually and recognizes substantial contributions to programmability and productivity in computing and substantial community service or mentoring contributions. The award includes a \$5,000 honorarium and the award recipient will be announced at the SC Conference. The recipient will give a presentation, normally technical, at the SC conference at which it is announced, or at an ACM or IEEE conference of the winner's choosing during the year following the announcement. The 2011 recipient of the Ken Kennedy Award was Susan Graham, for 'foundational compilation algorithms and programming tools; research and discipline leadership; and exceptional mentoring.'

Three of the above awards, the Eckert-Mauchly Award, the Maurice Wilkes Award, and the Influential ISCA Paper Award were presented at ISCA 2012 in Portland, OR.

New Areas and Programs

SIGARCH continues to broaden its definition of Computer Architecture to encompass both new technology challenges and new application areas. On the technology front, as Moore's Law draws to a close decreasing transistor reliability is driving a resurgence in novel ideas to build dependable systems from unreliable components. Similarly, the end of Dennard Scaling, which enabled power to largely scale with transistor counts, has resulted in a plethora of novel solutions using heterogeneity and/or new instruction set architectures to achieve fundamental increases in energy efficiency. On the application front, new architectures have been proposed to fundamentally revisit how to provide software security and increase programmer productivity. Finally, the importance of energy efficiency 'at all levels' is driving an increasing recognition of the commonalities between the mobile space and the data center.

To address these emerging areas, SIGARCH has sponsored tutorials and workshops in these emerging areas. ISCA 2012 included tutorials on workloads for the cloud, security, and power, as well as workshops on architectures for Big Data, energy efficiency and Dark Silicon.

Innovative Programs

SIGARCH was one of the 11 SIGs to sponsor the ACM Turing Centenary celebration, providing \$22,800 to support this very successful and highly-visible event. As part of this support, SIGARCH selected 7 computer architecture students to receive student scholarships to attend the celebration.

SIGARCH supports child care and companion support travel programs to conferences, although participation since approval of these programs has been low. Reimbursement for child care is capped at \$1000 per conference. SIGARCH has also formalized funding levels for its student travel grant program, and now provides a level of support to all conferences that SIGARCH sponsors at a

33% level or higher, which previously was only provided to the ISCA and ASPLOS conferences. SIGARCH awarded a total of \$80K in student travel across all conferences in 2012.

In 2012, SIGARCH also provided \$2,000 in support for the CRA-W/CDC Computer Architecture Mentoring Workshop which targets increasing participation by women and under-represented minorities.

Travel Grants

SIGARCH has regularly supported student travel grants to its flagship conferences, ISCA and ASPLOS, but starting from 2011, SIGARCH broadened this program to other SIGARCH-sponsored conferences. The allocation to each conference is based on SIGARCH revenues and the percentage sponsorship of the conference and is set by dividing the travel grant budget by number of attendees, giving an extra 33% allocation to international conferences, and a small additional budget (~10%) to ISCA as the flagship conference. The grants are restricted to student members of SIGARCH, following several votes of the SIGARCH membership. (But the travel grant administrators are encouraged to highlight the cheap SIGARCH online membership option available for students.) For FY2012, SIGARCH budgeted \$80,000 for travel grants. For ISCA 2012, SIGARCH funding for student travel was also supplemented by sponsorship from NSF, Google, and IEEE TCCA. 122 students were funded by the ISCA student travel grant, of which 65 of those were recipients of SIGARCH funding. Overall, ISCA had a record student attendance with 259 students accounting for the total 619 attendees. SIGARCH plans to continue to emphasize and support student participation in SIGARCH-sponsored conferences going forward as well. SIGARCH also supports a companion travel grant program for SIGARCH members who are either (1) a person with a physical disability necessitating a companion, or (2) a parent of an infant less than one year old who cannot travel without the infant and a care-provider for the infant. But we did not have occasion to disburse funds for this program in FY12.

Conferences

SIGARCH is a 50% cosponsor of ISCA, the International Symposium on Computer Architecture, which is the premier conference in the field of computer architecture. The 39th annual ISCA (ISCA 2012) was held in Portland, OR. Shih-Lien Lu was the General Chair, and Josep Torrellas was the Program Chair. ISCA 2012 received over \$96,000 in industrial donations to support the conference, plus an additional \$39,000 in support for student travel grants (\$20,000 of this from SIGARCH). ISCA 2013 will be held in Tel-Aviv, Israel, with Avi Mendelson as General Chair and Margaret Martonosi as Program Chair. Several cities are still under consideration for a domestic location for ISCA 2014.

The SC'XY Conference is jointly sponsored by SIGARCH and the IEEE Computer Society. Formerly known as the Supercomputing Conference, the conference has successfully evolved away from its focus on supercomputers and is now the High Performance Networking and Computing Conference. In addition to its technical success, SC'XY is large enough that it must be scheduled many years in advance. SC 2011 was held in Seattle, WA and SC 2012 will be held in Salt Lake City, UT. In Fall 2012, the ACM SGB with SIGARCH's support approved creation of the Special Interest Group in High-Performance Computing (SIGHPC). SIGARCH has since entered into an agreement with SIGHPC to transition sponsorship of SC'XY to SIGHPC, with SIGARCH remaining in-cooperation in the long term. Beginning with SC'12, any surpluses net of special projects will accrue to SIGHPC, to build up their fund balance. SIGHPC is also liable for any losses, with SIGARCH effectively acting as their banker in this event (i.e., in this hopefully rare case, SIGARCH will cover the loss, but SIGHPC will remain obligated to eventually repay SIGARCH).

SIGARCH is a cosponsor of the Conference on Architectural Support for Programming Languages and Operating Systems, commonly known as ASPLOS, along with SIGPLAN and SIGOPS. The conference had been held biannually since 1982, alternating its location between San Jose and Boston. Starting in 2008 the conference has been held annually. ASPLOS 2012 was held in

London, UK, the first international venue, with Tim Harris serving as General Chair and Michael Scott serving as Program Chair. ASPLOS 2013 will be held in Houston, TX, with Vivek Sarkar serving as General Chair and Ras Bodik serving as Program Chair.

SIGARCH sponsors the International Conference on Supercomputing (ICS). ICS 2012 was held in Venice, Italy. Kyle Gallivan and Utpal Banerjee were General Co-Chairs and Gianfranco Bilardi and Manolis Katevenis were Program Co-Chairs. ICS 2013 will be held in Portland, OR. Allen Maloney will be General Chair and Sam Midkiff and Mario Nemirovsky will be Program Co-Chairs.

The nineteenth Symposium on Parallel Algorithms and Architectures (SPAA 2012), jointly sponsored by SIGARCH and SIGACT, was held in Pittsburgh, PA. The General Chair was Guy Belloch, and the Program Chair was Maurice Herlihy. SPAA 2013 will be held in Pittsburgh, with Guy Blelloch as General Chair.

SIGARCH is one-half co-sponsor of the IEEE/ACM International Conference on Grid Computing. Grid 2011 was held in Lyon, France, with Nils Gentschen Felde as General Chair and Shantenu Jha as Program Chair. Grid 2012 will be held in Beijing, China, with Dieter Kranzmueller and Weimin Zheng as General Co-Chairs and Rajkumar Buyya and Hai Jin as Program Co-Chairs.

SIGARCH is one-half cosponsor of the International Symposium on High Performance Distributed Computing. HPDC 2012 was held in Delft, The Netherlands, with Dick Epema as General Chair and Thilo Kielmann and Matei Ripeanu as Program Co-Chairs. HPDC 2013 will be held in New York City, NY, with Manish Parashar and Jon Weissman as General Co-Chairs and Renato Figueiredo and Dick Epema as Program Co-Chairs.

SIGARCH is one-third cosponsor of the Conference on Parallel Architectures and Compiler Techniques (PACT), along with the IEEE Computer Society and IFIP, and annually held in the fall. PACT 2011 was held in Galveston, Texas, with Laurence Rauchwerger as General Chair and Vivek Sarkar as Program Chair. PACT 2012 will be held in Minneapolis, MN with Pen-Chung Yew and Sangyeun Cho as General Co-Chairs and Luiz DeRose and David Lilja as Program Co-Chairs.

SIGARCH is one-fourth co-sponsor of the Symposium on Architectures for Networking and Communications Systems (ANCS). ANCS 2011 was held in Brooklyn, NY, with H. Jonathan Chao as General Chair and Jose Duato and Tilman Wolf as Program Co-Chairs. ANCS 2012 will be held in Austin, TX, with Tilman Wolf as General Chair and Andrew Moore and Vikto Prasanna as Program Co-Chairs.

In 2007 SIGARCH was a founding co-sponsor of the International Symposium on Networks-on-Chips (NOCS). NOCS 2012 was held in Lyngby, Denmark, co-located with The 18th IEEE International Symposium on Asynchronous Circuits and Systems (ASYNC 2012). Jens Sparsø and Jan Madsen were General Co-Chairs, and Diana Marculescu and Chita Das were Program Co-Chairs. NOCS 2013 will be held in Tempe, AZ, with Karam S. Chatha and Chita Das as General Co-Chairs and Natalie Enright Jerger and John Bainbridge as Program Co-Chairs.

SIGARCH also became a cosponsor of the International Conference on Autonomic Computing (ICAC) in 2007. ICAC 2011 was held in Karlsruhe, Germany, with Hartmut Schmeck and Wolfgang Rosenstiel as General Co-Chairs, and Tarek Abdelzaher and Joe Hellerstein as Program Co-Chairs. ICAC 2012 will be in San Jose, CA, with Dejan Milojicic as General Chair and Vanish Talwar and Dongyan Xu as Program Co-Chairs.

In addition to the above conferences, SIGARCH is co-sponsoring, or in cooperation with, several other conferences. SIGARCH has a sponsorship position in SenSys, a conference on Sensor Systems. In addition, SIGARCH has in-cooperation status with TCE, HotPar, HIPEAC, IPDPS, CoolChips, PAPA, and Nano-Net.

Publications

CAN (Computer Architecture News), SIGARCH's newsletter, is published 5 times a year. Of those five, the ISCA Proceedings form a special issue, and the ASPLOS Proceedings is likewise distributed as a special issue. The regular issues of the newsletter consist of technical contributions, reports of panels, Internet nuggets (the most interesting or controversial articles from the comp.arch newsgroup), book reviews, and calls for papers. There are occasional single topic special issues based principally on workshops. Proceedings of SC, SPAA and ICS are available through the Member Plus program. In 2009, SIGARCH began offering a new electronic membership for regular members and students, at reduced cost with no proceedings mailed. Currently, more than half, 740, of SIGARCH's members have registered under the electronic membership option. Given the continuing shift to electronic memberships, the SIGARCH Executive Committee is exploring alternatives to revitalize, reform, or replace CAN.

Finances

SIGARCH enjoys a healthy fund balance that is currently larger than the \$1.7M fund balance required by the ACM for sponsorship of SIGARCH conferences for FY'12. The projected SIGARCH fund balance for FY'12 is \$3,002,207. Given prior large surpluses, SIGARCH and the SC Steering Committee have an agreement that some of the future profits from SC'XY will be in large part returned to the SC community, in the form of a series of project-oriented grants (to be matched by the other sponsor of SC'XY, the IEEE Computer Society). The grant amounts are capped by the average surplus over the first two of the previous three years. ISCA, SIGARCH's flagship conference, continues to be healthy and show attendance near the top of historical levels.

SIGARCH has been losing money on print-based subscriptions and breaks-even on online-digital subscriptions, but makes money on average from conferences. To address the loss on print-based subscriptions (SIGARCH was losing \$13 per professional print membership and \$23 per student print membership), in FY12, the membership for these categories were increased to breakeven. The online membership rates were not changed and continue to be \$6 and \$2 respectively.

SC Conference Grants

For SC'11, the SC leadership requested \$859,090, of which \$429,545 is SIGARCH's share, in funds for special projects related to the SC community. For SC'12, \$385,971 has been budgeted for SC special projects. As part of the transition plan, SIGARCH is responsible for ACM's share of the special projects budget for SC'12 and SC'13 and is responsible for a pro rata share with SIGHPC (based on relevant surpluses) for SC'14. SIGHPC will be fully responsible for ACM's share of special projects beginning with SC'15.

Membership

SIGARCH membership was declining gradually since 1999, dropping from its peak of 1452 in 2005 to 1344 in 2009, but has started to recover, increasing to 1426 as of Mar. 2012. SIGARCH's membership continues to shift to electronic-only membership, available at reduced cost, and is likely a factor in growing membership. Last year, more than half, 740, of SIGARCH's members chose electronic-only membership. Our changes to the membership fees may have a transient effect on membership, and we are monitoring this carefully as well as planning conservatively. ISCA, SIGARCH's flagship conference, continues to be healthy and show attendance near the top of historical levels.

Summary

SIGARCH remains a financially healthy institution with an enthusiastic membership. The interest of its members can be gauged by the health of all of its major conferences in the past year. The challenges remain as they have in previous years: how to better serve our members, how to

encourage other members of the architecture community to join, how to help steer the community as the nature of our field changes, and how to use our fund balance most effectively.

SIGART FY'12 Annual Report
July 2011 - June 2012
Submitted by: Yolanda Gil, Chair

The scope of SIGART consists of the study of intelligence and its realization in computer systems. This includes areas such as autonomous agents, intelligent user interfaces, knowledge discovery, human language technologies, cognitive modeling, knowledge representation, planning, robotics, problem solving, machine learning, and computer vision.

Activities during 2011/2012:

1. SIGART OFFICERS

The elected SIGART officers are:

Yolanda Gil, USC/Information Sciences Institute (Chair)
Qiang Yang, Hong Kong University of Science and Technology (Vice-Chair)
Gautam Biswas, Vanderbilt University (Secretary/Treasurer)

SIGART has an Advisory Board whose members are:

Tom Dietterich, Oregon State University
Jim Hendler, Rensselaer Polytechnic Institute
Haym Hirsh, Rutgers University
Eric Horvitz, Microsoft Research
Craig Knoblock, USC/Information Sciences Institute

We were very saddened by the loss of David Waltz, who passed away in 2012. He was an Advisory Board member.

In addition, SIGART has several Appointed Officers:

Mehran Sahami, Stanford University (Educational Activities Liaison)
Peter Norvig, Google Research (Educational Activities Liaison)
Weike Pan, Hong Kong University of Science and Technology (Information Officer)

2. AWARDS

The ACM SIGART Autonomous Agents Research Award is an annual award for excellence in research in the area of autonomous agents.

The 2012 ACM SIGART Autonomous Agents Research Award recipient is Professor Moshe Tennenholtz (Technion/Microsoft Research Israel). Professor Tennenholtz is honored for his substantial and sustained contributions to the foundations of multi-agent systems. His contributions range from the first formal studies of social laws for multi-agent systems, through contributions to the computational theory of auctions, multi-agent learning, computational social choice theory, reputation and ranking systems, and the notion of program equilibrium. In addition, Professor Tennenholtz has a substantial track record of outstanding community service, including serving as an editor-in-chief of JAIR: the Journal of AI Research. Professor Tennenholtz gave an invited presentation at the 2012 AAMAS Conference titled "Social Contexts".

3. CONFERENCES

SIGART co-sponsored the following conferences:

* ACM International Conference on Intelligent User Interfaces (IUI), February 14-17, 2012, Lisbon, Portugal.

* 5th International Conference on Human-Robot Interaction (HRI), March 5-8, 2012, Boston, Massachusetts.

* IEEE/ACM International Conference on Automated Software Engineering (ASE), September 3-7, 2012 in Essen, Germany.

In addition, SIGART granted in-cooperation status to many international conferences.

SIGART has an agreement with the International Foundation for Autonomous Agents and Multiagent Systems (IFAAMAS) to continue a special cooperation status regarding the AAMAS conference and the ACM SIGART Autonomous Agents Research Award indefinitely.

4. EDUCATIONAL ACTIVITIES

SIGART is participating in the IEEE/ACM Curriculum Initiative to review CS curricula. Mehran Sahami and Peter Norvig are SIGART Appointed Officers that are Educational Activities Liaisons and are participating in the IEEE/ACM joint initiative.

SIGART awarded a number of scholarships to students to attend the conferences co-sponsored by SIGART. The amounts of scholarships varied from \$1,000 to \$10,000 per conference, depending on the conference size. Funding students is a good way to ensure long term growth and vitality in the AI community and a good investment for the future.

SIGART co-sponsored with AAAI the 2012 SIGART/AAAI Doctoral Consortium. The Doctoral Consortium is held each year during the AAAI conference, and provides an opportunity for Ph.D. students to discuss in depth their research interests and career objectives with the other participants and a group of established AI researchers that act as individual mentors. Presentations and discussions take place over two days of intense meetings prior to the AAAI conference.

5. OUTREACH ACTIVITIES

SIGART has a web site with up-to-date information about the SIG and its activities. Weike Pan is the SIGART Information Officer and developed and maintains the site.

6. PLANS FOR THE FUTURE

SIGART plans to continue to support communities related to AI in a broad sense. SIGART will continue expanding the areas covered by co-sponsored and in-cooperation conferences to ensure that communities that work in AI or find inspiration with AI topics maintain ties with AI. This will increase the visibility of SIGART and help the growth of new communities.

SIGBED FY'12 Annual Report
July 2011 - June 2012
Submitted by: Christoph Kirsch, Chair

Awards

SIGBED offers a student award in the name of late Dr. Frank Anger to promote cross-disciplinary research between embedded systems and software engineering. SIGBED solicited applications from qualified student members in 2011 and selected two winners of the award, Mohamed A. Bamakhrama (Leiden University) and Miroslav Pajic (University of Pennsylvania).

SIGBED also offers the SIGBED-EMSOFT Best Paper Award. The annual award is presented to the individual(s) judged by an award committee to have written the best paper appearing in the EMSOFT (Embedded Software) conference proceedings. The selection criteria are the scientific quality of the paper and the exposition of the ideas. The 2011 SIGBED-EMSOFT Best Paper is titled "[Real-Time Resource-Sharing under Clustered Scheduling: Mutex, Reader-Writer, and k-Exclusion Locks](#)" and written by Björn B. Brandenburg and James H. Anderson.

Significant papers on new areas that were published in proceedings

ESWEEK featured three keynotes on significant challenges in embedded computing: [Arvind](#), MIT, "[Automatic generation of hardware/software interfaces](#)"; [Jane W.S. Liu](#), Academia Sinica, "[To alert, rescue and recover: critical information technologies for managing mega disasters](#)"; and [Gérard Berry](#), INRIA, "[Challenges and potential solutions for complex embedded systems](#)".

Innovative programs which provide service to some part of your technical community

SIGBED continues to sponsor two major federated conferences, CPSWEEK in the spring [HiCoNS, HSCC, ICCPS, IPSN, RTAS] and ESWEEK [CASES, CODES+ISSS, EMSOFT] in the fall, and started in-cooperation status with DAC and ICCVE.

We re-designed the SIGBED [web site](#) from scratch and updated its content. We also created an @sigbed Twitter account. The web site includes a blog for announcements. We also plan to use the blog and twitter account for real-time postings during CPSWEEK and ESWEEK.

SIGBED now lists ACM TODAES in addition to ACM TECS and ACM TOSN as closely related journals. The SIGBED review, edited by Oleg Sokolsky of University of Pennsylvania, provides a forum for technical contributions by members as well as lists of upcoming events.

We lowered membership rates to \$15 for a regular membership and \$5 for a student membership.

Issues

SIGBED is currently working on establishing student travel grants.

SIGBIOINFORMATICS FY'12 Annual Report
July 2011 - June 2012
Submitted by: Aidong Zhang, Chair

ACM SIGBIOINFORMATICS

ACM Special Interest Group in Bioinformatics, Computational Biology, Biomedical Informatics

The ACM Special Interest Group on Bioinformatics, Computational Biology, and Biomedical Informatics (SIGBIOINFORMATICS) has been instituted in January 2011 with the aim of focusing on research on bioinformatics data management topics, roughly covered by the so-called biological and biomedical data, knowledge, and information management. The focus of SIGBIOINFORMATICS is to bridge computer science, mathematics, statistics with biology and biomedicine sharing research interests in the management of data related to life sciences. The mission of ACM SIGBioinformatics is to support advanced research, training, and outreach in Bioinformatics, Computational Biology, and Biomedical Informatics by stimulating interactions among researchers, educators and practitioners from related multi-disciplinary fields. Since January 2011, SIG Bioinformatics has recruited 254 members.

SIGBIOINFORMATICS Website

The SIGBIOINFORMATICS website was created and is maintained by Dr. Mohammed Zaki of Rensselaer Polytechnic Institute (see <http://www.sigbioinformatics.org/>). The logo for SIG Bioinformatics:



SIGBIOINFORMATICS Conference (ACMBCB):

The 2011 ACM International Conference on Bioinformatics, Computational Biology and Biomedicine (ACM BCB 2011) (Chicago, August 1-3, 2011) was the second ACM conference in the areas of bioinformatics, computational biology, and biomedical informatics.

ACMBCB2011 Best Paper Award

FUSE: Towards Multi-Level Functional Summarization of Protein Interaction Networks, Boon-Siew Seah, Nanyang Technological Univ; Sourav S Bhowmick, Nanyang Technological Univ; C Forbes Dewey, Jr, MIT, USA; Hanry Yu, National University of Singapore

ACMBCB2011 Best Poster Award

Ranking Docked Models of Protein-Protein Complexes Using Predicted Partner-Specific Protein-Protein Interfaces: A Preliminary Study, Li Xue, Rafael Jordan, Yasser EL-Manzalawy, Drena Dobbs, Vasant Honavar, Iowa State University

The 2012 ACM International Conference on Bioinformatics, Computational Biology, and Biomedicine (ACM BCB 2012) will be held in Orlando, October 7-10, 2012.

SIG Bioinformatics Community meeting was held on August 3, 2011 during the ACM BCB 2011 conference.

The ACM Tech Pack Meeting the Annual SIG Bioinformatics Community Meeting and the ACM Tech Pack Meeting.

Special Program – Women in Bioinformatics

This year, we organized a special program, Women in Bioinformatics, sponsored by the US National Science Foundation during the BCB2011 conference. We featured one keynote speech by Nancy Cox, a special panel moderated by the panel chair, Cathy Wu, from the University of Delaware. We were able to support 21 female and minority students to participate in the BCB11 conference, many of them were not able attend otherwise.

In Cooperation Conferences

SIGBioinformatics provided sponsorship for the following conferences:

- [SWAT4LS '11](http://www.swat4ls.org/workshops/london2011/): Semantic Web Applications and Tools for Life Sciences, London, UK, December 2011 (see <http://www.swat4ls.org/workshops/london2011/>)
- [BioVis'11](#): 1st IEEE Symposium on Biological Data Visualization, Providence, RI, October 2011.
- [CMSB'11](http://contraintes.inria.fr/CMSB11/): 9th International Conference on Computational Methods in Systems Biology, Paris, France, September 2011 (see <http://contraintes.inria.fr/CMSB11/>).

NSF Awards

SIGBIOINFORMATICS was awarded one National Science Foundation grants to support ACMBCB conference:

1. 'III:Small: Women in Bioinformatics Initiative at ACM-BCB 2011' (period: 6/15/11-5/31/12, Amount: \$22,500, PI: Wei Wang, co-PIs: Robert Grossman, Andrey Rzhetsky, Cathy Wu, Aidong Zhang)

SIGCAS FY 2012 Annual Report
July 2011 — June 2012
Submitted by: Andrew Adams, SIGCAS Chair

1. General Report

No awards were made in 2010. 2011 award nominations were sought in late 2011 and the award decisions made in February.

Appointment of Ben Gerber of MITRE Corporation as the new Newsletter editor filled a hole which had existed for a couple of years. Former chair Flo Appel completed editing the existing tranche of papers which had built up in 2011 and Issues 1 and 2 of Volume 41 were finally published in October and December. The appointment was unanimously supported by the editorial board and the executive committee. Some delays to the publication schedule in 2012 continued, but the first issue of volume 42 is imminent in August 2012.

Basic maintenance of the SIGCAS website content has been undertaken, but the site is now clearly out of date with modern social network expectations, and is also operating on an out of date platform (see below for plans on rectifying this).

2. Awards

SIGCAS gives two awards: the general "Making a Difference Award" and the more focused "Outstanding Service Award". From a strong set of nominations Oliver "Ollie" Smoot, Jr. was selected as the recipient of the Making a Difference Award, given his long career (including long service with USACM) on issues of standardisation. Carol Spradling's long and significant service to SIGCAS, in particular as our representative on the ACM Education committee, was recognised with the "Outstanding Service Award". Dr. Spradling's plaque was given in person during the pre-SIGCSE workshop (see below). Mr. Smoot's plaque has yet to be presented (a suitable occasion is still being sought).

3. Significant papers on new areas that were published in proceedings

N/A

4. Significant programs that provided a springboard for further technical efforts

N/A

5. Innovative programs which provide service to some part of your technical community

SIGCAS and COPE (Committee on Professional Ethics) jointly ran a one-day workshop on the teaching of computer ethics, before the main SIGCSE conference in Raleigh, NC on Feb 28th 2012. SIGCAS Vice-Chair Netiva Caftori, Former Chair Flo Appel ran the morning "SIGCAS" element while SIGCAS rep to COPE Don Gotterbarn ran the afternoon COPE workshop, which attracted around 25 attendees, and included the following highlights:

- ✧ The CS 2013 Curriculum on society and professional practice
- ✧ Discussion on computers and society module syllabi.
- ✧ Introduction to The Computer Professionals' Pledge
- ✧ Sustainability in Computing

Former Chair Flo Appel replaced Carol Spradling as SIGCAS' representative on the ACM Education Council (Carol remains engaged as an alternate representative should Prof Appel be unavailable). The main activity of the education committee at present is the development of the new Curriculum 2013. SIGCAS input into this process is recognised as crucial and is significant.

We agreed "In Cooperation Status" with the following conferences:

- ✧ ICE '12: International Conference on Engineering, Technology and Innovation

- ^ FDG '12: International Conference on the Foundations of Digital Games

6. Brief summary of key issues that the SIG membership will have to deal with in the next 2-3 years

The web presence of SIGCAS needs a radical overhaul. Volunteers from amongst the membership have been sought and received to support this overhaul. This has now become the top priority for the executive committee and it is planned that a new platform will be requested from ACM HQ technical support in which a revised website with links to various social network systems will be built and tested before replacing the current site. New elements which are desired in the new site (depending on sufficient engagement by members):

- ^ Direct member interaction on the SIGCAS website;
- ^ Links to member groups on sites such as LinkedIn, Facebook, etc.;
- ^ Encouragement of members to use #SIGCAS on systems such as Twitter for relevant postings;
- ^ Social bookmarking of relevant news articles;
- ^ Social referencing of relevant academic papers.

SIGCAS does not run its own major conference but there are a number of highly relevant conferences which run annually or bi-annually including Ethicomp, CEPE (Computer Ethics and Philosophical Enquiry), IEEE-ISTAS and others. The Executive Committee will be more proactive in seeking to make formal connections with these conferences (we already regularly have "in cooperation" status with some of them), including "in cooperation" status, (part) sponsorship of keynote speakers, SIGCAS Birds-of-a-feather sessions, membership drives at the conferences (distribution of SIGCAS fliers, links to the SIGCAS website from the conference site, sponsorship of receptions at which a presentation of SIGCAS is made) and other possibilities.

SIGCHI FY'12 ANNUAL REPORT
July 2011 - June 2012
Submitted by Gerrit C. van der Veer, President

1. Awards

1.1 SIGCHI made the following awards in 2011-2012:

- Lifetime Achievement in Research: Dan Olsen
- Lifetime Achievement in Practice: Joy Mountford
- CHI Academy: Ben Bederson, Steve Benford, Hugh Dubberly, Carl Gutwin, Joy Mountford, Alan Newell, Yvonne Rogers
- Social Impact: Award: Batya Friedman
- Lifetime Service Award: Michael Atwood, Kevin Schofield

1.2 SIGCHI Conference awards:

- Best of CHI Awards for Papers:

Improving Command Selection with CommandMaps

Joey Scarr, *University of Canterbury, New Zealand*
Andy Cockburn, *University of Canterbury, New Zealand*
Carl Gutwin, *University of Saskatchewan, Canada*
Andrea Bunt, *University of Manitoba, Canada*

Looking Glass: A Field Study on Noticing Interactivity of a Shop Window

Jörg Müller, *TU Berlin, Germany*
Robert Walter, *TU Berlin, Germany*
Gilles Bailly, *TU Berlin, Germany*
Michael Nischt, *TU Berlin, Germany*
Florian Alt, *University of Stuttgart, Germany*

Touché: Enhancing Touch Interaction on Humans, Screens, Liquids, and Everyday Objects

Munehiko Sato, *Disney Research, Pittsburgh & The University of Tokyo, USA*
Ivan Poupyrev, *Disney Research, Pittsburgh, USA*
Chris Harrison, *Disney Research, Pittsburgh & Carnegie Mellon University, USA*

Detecting Error-Related Negativity for Interaction Design

Chi Thanh Vi, *University of Bristol, UK*
Sriram Subramanian, *University of Bristol, UK*

Empathy, Participatory Design and People with Dementia

Stephen Lindsay, *Newcastle University, UK*
Daniel Jackson, *Newcastle University, UK*
Cassim Ladha, *Newcastle University, UK*
Karim Ladha, *Newcastle University, UK*
Katie Brittain, *Newcastle University, UK*
Patrick Olivier, *Newcastle University, UK*

Personas and Decision Making in the Design Process: An Ethnographic Case Study
Erin Friess, *University of North Texas, USA*

Using Rhythmic Patterns as an Input Method
Emilien Ghomi, *Univ Paris-Sud & CNRS, France*
Guillaume Faure, *Univ Paris-Sud & CNRS, France*
Stéphane Huot, *Univ Paris-Sud & INRIA, France*
Olivier Chapuis, *Univ Paris-Sud & CNRS, France*
Michel Beaudouin-Lafon, *Univ Paris-Sud & CNRS & INRIA, France*

Communitysourcing: Engaging Local Crowds to Perform Expert Work Via Physical Kiosks
Kurtis Heimerl, *University of California, Berkeley, USA*
Brian Gawalt, *University of California, Berkeley, USA*
Kuang Chen, *University of California, Berkeley, USA*
Tapan S. Parikh, *University of California, Berkeley, USA*
Björn Hartmann, *University of California, Berkeley, USA*

Revisiting the Jacquard Loom: Threads of History and Current Patterns in HCI
Ylva Fernaeus, *Mobile Life, KTH, Sweden*
Martin Jonsson, *Södertörn University, Sweden*
Jakob Tholander, *Stockholm University, Sweden*

The Normal Natural Troubles of Driving with GPS
Barry Brown, *Stockholm University, Sweden*
Eric Laurier, *University of Edinburgh, UK*

Uncomfortable Interactions
Steve Benford, *The University of Nottingham, UK*
Chris Greenhalgh, *The University of Nottingham, UK*
Gabiella Giannachi, *The University of Exeter, UK*
Brendan Walker, *The University of Nottingham, UK*
Joe Marshall, *The University of Nottingham, UK*
Tom Rodden, *The University of Nottingham, UK*

ClayVision: The (Elastic) Image of the City
Yuichiro Takeuchi, *Sony Computer Science Laboratories, Inc., Japan*
Ken Perlin, *New York University, USA*

Observational and Experimental Investigation of Typing Behaviour Using Virtual Keyboards for Mobile Devices
Niels Henze, *University of Oldenburg, Germany*
Enrico Rukzio, *University of Duisburg-Essen & Lancaster University, Germany*
Susanne Boll, *University of Oldenburg, Germany*

- Best of CHI Awards for Notes:

TeleAdvisor: A Versatile Augmented Reality Tool for Remote Assistance
Pavel Gurevich, *IBM Research, Haifa, Israel*
Joel Lanir, *University of Haifa & IBM Research, Haifa, Israel*

Benjamin Cohen, *IBM Research, Israel*
Ran Stone, *IBM Research - Haifa, Israel*

Choosing to Interleave:

Human Error and Information Access Cost

Jonathan Back, *University College London, UK*

Anna L. Cox, *University College London, UK*

Duncan P. Brumby, *University College London, UK*

- Best of CHI Award for Case Study:

Vintage Radio Interface: Analog Control for Digital Collections

Mathieu Hopmann, *Ecole Polytechnique Fédérale de Lausanne, Switzerland*

Mario Gutierrez, *Logitech Incubator, Switzerland*

Frederic Vexo, *Logitech Incubator, Switzerland*

Daniel Thalmann, *Ecole Polytechnique Fédérale de Lausanne, Switzerland*

2. Significant Papers on new areas that were published in proceedings

See 1.2

3. Significant programs that provided a springboard for further technical efforts

3.1. SIGCHI Sponsored Regional Workshops for HCI Community in Asia (2011) and HCI Community in Latin America (2012)

Purposes

In order to better anticipate the possibility of SIGCHI events (including the CHI Conference and SIGCHI Sponsored Specialized Conferences) in Asia and Latin America, we need to have a clearer understanding of the actuality of HCI development in these developing regions. Capturing an understanding of HCI knowledge and practice that exists in the developing world would be useful in formulating a strategy for using SIGCHI resources with clear targets to help developing world HCI communities mature and in building/strengthening ties with them.

Aiming at this, we organized two SIGCHI sponsored workshops on HCI in developing regions. The first was held in Asia (a three-day event held in Beijing, China in March 2011), and the second was a three day even in Latin America (a three day event held in Belo Horizonte, Brazil in July of 2012). Both were aimed at better understanding the HCI situations in developing countries in the following aspects:

- The current status of HCI development in academia, industry, education, organizations etc.
- The problems and challenges faced in HCI development in developing communities.
- Where help from external bodies like SIGCHI can make a difference and how
- How SIGCHI can better involve local HCI communities in the global SIGCHI community and help them mature - specifically what are the areas SIGCHI needs to work on with priority and what are the feasible approaches and achievable goals?

The results of these workshop has helped SIGCHI leadership to have a direct contact with the areas HCI communities and their leaders and get familiar with them, so that better and close working relationships could be developed with ease later on. The Asian workshop has helped in developing a plan for a CHI Conference in Asia in 2015, and the Latin American workshop has resulted in additional plans for that region.

Workshop Participants

These were targeted workshops. For Beijing, we invited representatives from Asian countries/regions (21) and from the SIGCHI committee (6), totaling 27, to attend the workshop. A smaller number of countries were represented in the Latin American workshop, though it had approximately the same number of participants. The following represented thinking about the distribution of the invited participants:

- Where there was some HCI activity, 1 for each country/region, 2 to 3 participants for countries/regions with bigger HCI communities, 5 for the host country
- Representing local SIGCHI chapters or HCI organizations if possible
- Representing different disciplines: computer science, design, psychology, ergonomics etc.

Logistics and Venue

The Asia workshop was held in Beijing, China, March 25-27th, 2011. This was shortly after the ACM SIGCHI Sponsored CSCW 2011 conference in Hangzhou. The Latin America workshop was held in Belo Horizonte, Brazil, July 12-14, 2012.

Expected Outcomes

- A report on the state of the HCI field in the region.
- Local action items to encourage growth of the regional communities.
- Key areas identified to be worked on by SIGCHI towards staging future SIGCHI events in Asia and Latin America and the initial action plans for such events.
- For Asia, a total of 5 follow-up events have been held (in Asia and at the CHI conferences in 2011 and 2012) which demonstrate ongoing activities to grow the communities. Similar activities are being planned by the regional Latin American communities.

Sponsorship

ACM SIGCHI was the primary sponsor. SIGCHI budgeted approximately \$50K for each event to cover travel and meeting expenses for the participants.

3.2 CHI Communities

What are they?

Communities are collections of people that are associated with SIGCHI who share a common interest. Communities may be geographic or topical. A community is a collection of people who by banding together can speak with a common voice and organize their needed activities.

Infrastructure

SIGCHI has created an infrastructure for the formation of communities. Any 5 SIGCHI members can form a community with the approval of the SIGCHI EC. They can then solicit members from the community at large. A SIGCHI member can be a voting member of at most 5 communities so as to focus their interest. They can be an affiliate member of as many communities as they desire. The infrastructure automatically manages elections, announcements, web space and mailing lists for communities.

Progress

We now have 12 communities functioning around various interests. These range from the large communities around CSCW (189 members), UIST (184 members) and UBICOMP (122 members) to small groups just getting started. We have created mechanisms for emailing members and leadership, taking surveys and polls, developing websites and forming discussion groups. As yet there is not a lot of activity as we are still putting training and development resources in place.

So far 3 of the communities have progressed to the point of holding officer elections. We believe that this elective process will mitigate problems around success and representativeness that have appeared with some conferences.

4. Innovative programs which provide service to some part of our technical community

4.1. Public Policy

2010-2011 was the first full year that we had an Adjunct Chair for Public Policy to create and curate a discussion of public policy within the SIGCHI community. Here is the progress made in the 2011-2012 year:

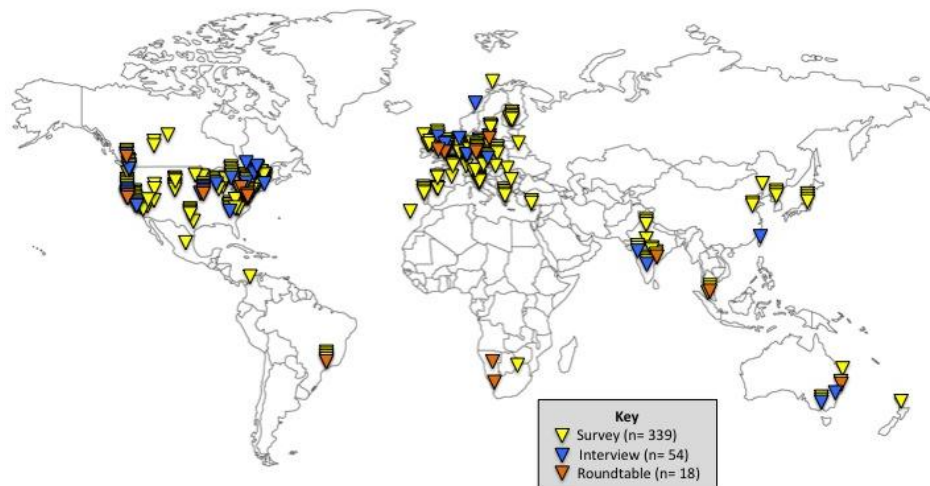
- Continued growth of the SIGCHI International Public Policy Committee with 15 members from 10 different countries. Held two face to face meetings of the committee: in September 2011 at the INTERACT conference in Lisbon, Portugal, and May 2012 at the CHI conference in Austin
- Planned and held a SIG at the CHI 2012 conference in Austin about HCI research funding around the world, and a panel about engaging US policymakers
- Coordinated SIGCHI co-signing of two policy statements coming out of USACM, one about US regulations related to human subjects research, the other related to the revamping of the US Section 508 regulation on technology access for people with disabilities.
- Currently organizing (with members of the SIGCHI International Public Policy Committee) a proposal for a workshop at CHI 2013 in Paris about public policy, with the goal to write up a white paper as a foundation for the topic. Also currently planning on data collection effort involving interviews with policymakers around the world to understand what informational needs they have related to HCI policy research.
- Are investigating how to improve access for people with disabilities in three areas: the SIGCHI web site, digital library content, and conference accessibility.

4.2. Education

The SIGCHI Adjunct Chair for HCI Education will work on developing a committee of international representatives familiar with issues related to HCI Education, to be called the SIGCHI HCI Education Committee. We acknowledge that local representatives are most qualified to deal with local issues in their own countries, states and institutions. Therefore, for countries with already-existing groups, the chair of the existing group will be considered as a potential invitee to serve on this international committee. This process will start immediately with the help of the SIGCHI VP.

Much of the committee's activities will be conducted using new communications technologies but we suggest that there should be an annual meeting, hosted and sponsored partly by ACM and partly by the funding body of the host country. The first of these meetings would be in the USA partially hosted by NSF funding.

We have taken some initial steps to address the goals identified above in the following ways. (i) conducted a survey of 339 SIGCHI members who are active in HCI education. Survey respondents come from 30 countries, and comprise 54% academics, 25% students, 34% industry professionals. See figure below for geographical distribution; (ii) hosted a round-table discussion at CHI'2012 with 16 participants from 8 countries who are known leaders in HCI education to get their feedback on the survey results and recommendations for next steps; (iii) started to collect syllabuses and members opinions of HCI texts; (iv) launched an online community for HCI education; (v) begun a relationship with other ACM communities interested in education; and (vi) started to examine how SIGCHI can leverage its own courses for the greater benefit of its members and the world at large.



5 Summary of key issue that the membership of SIGCHI will deal with in the next 2-3 years

We will continue to advance the internationalization of SIGCHI in the next few years with a continuing focus on Asia. We will also entertain specific proposals for workshops in other areas such as, but not limited to, Africa, the Indian subcontinent, and South America.

We will continue to seek to enhance our relationships to other societies and organizations broadly concerned with human computer interaction.

Local Chapters

In 2012, SIGCHI has 37 active local chapters on 5 continents in 21 countries, of which 34 are professional and 3 student chapters. The total number of local chapter members is over 3,000. SIGCHI Local Chapters are doing valuable work in gathering locally together students, academics, as well as practitioners in the field of HCI. This is why SIGCHI is actively searching for better means to support our chapters. Besides the existing ACM chapter benefits, SIGCHI continued to provide the following benefits and opportunities for its local chapters during FY 2011-2012:

- community infrastructure, web tools and resources
- CHI course notes distribution for chapter members.

In addition, starting from FY 2012-2013, SIGCHI EC decided to offer the SIGCHI Local Chapters greater visibility through a local chapters' column in the Community Square of the interactions magazine.

SIGCOMM FY'12 Annual Report
July 2011 - June 2012

Submitted by: Bruce Davie, Chair and Tilman Wolf, Secretary/Treasurer

SIGCOMM continues to be a vibrant organization serving the broad community of people interested in all aspects of computer networking. We continue to run a stable of successful, high-impact conferences, several of these being in co-operation with other SIGs. There are a number of highlights to report from the past year.

Our flagship conference, after being held in Europe and India in the past two years, moved back to North America and was held in Toronto in August 2011. The conference was very successful with high attendance numbers, strong fundraising, and an overall surplus that helped the SIG finance its other activities.

One of the major efforts of the SIG for several years has been to increase the involvement of members of the community from outside the U.S. and Europe. This year, we continued recent programs to support funding for regional conferences in the networking field as well as adding additional funds to the geodiversity travel grant program. The latter program enables graduate students and young faculty from under-represented regions to attend our flagship conference. The current set of regional conferences we support financially includes COMSNETS, a major networking conference in India, the Latin American Networking Conference (LANC) and the Asian Internet Engineering Conference (AINTEC). We continue to foster the success of these conferences by means such as invited speaker travel funds and student travel grants. In addition to supporting regional conferences, the SIG has capitalized on its strong financial position to continue general student travel support to both SIGCOMM and CoNEXT conferences.

The SIGCOMM newsletter, *Computer Communications Review*, continues to thrive as a journal with high quality and timely articles under S. Keshav's editorial guidance. Acceptance rates for the newsletter are around 20%, on par with top-tier conferences. CCR turnaround time is rapid compared to most journals: for technical papers it is 8 weeks for review and 16 weeks for publication; for editorials it is 1-3 days for review and 6 weeks for publication. We continue to offer both online and print access to the newsletter. This year, we started offering a discounted, online-only SIG membership that does not include a print copy of the journal. SIG members who still desire a print membership can continue to receive a print copy (at a slightly higher membership rate). As S. Keshav's term as CCR editor-in-chief is ending, we have recruited Dina Papagiannaki to take over starting September 2012.

With respect to awards, SIGCOMM has recognized Nick McKeown with the SIGCOMM award for lifetime achievement; he will receive the award and present a keynote talk at the annual SIGCOMM conference in August 2012 in Helsinki. SIGCOMM also has recognized "Multi-Resource Fair Queueing for Packet Processing" by Ali Ghodsi, Vyas Sekar, Matei Zaharia and Ion Stoica as the best paper and "Picasso: Flexible RF and Spectrum Slicing" by Steven Hong, Jeff Mehlman and Sachin Katti as the best student paper in that conference. The "Test of Time" award will also be given at the conference for the best papers with long-lasting impact from 10-12 years ago. This paper is from SIGCOMM 2002: "Tussle in cyberspace: defining tomorrow's internet", by David Clark, Karen Sollins, John Wroclawski and Bob Braden.

SIGCOMM has recognized Sylvia Ratnasamy with its Rising Star award; she was given the award at the CoNEXT conference held in December 2011 in Tokyo. This year, we also instituted a new doctoral dissertation award, to recognize the best Ph.D. thesis in the computer networking field in a given year. The first doctoral dissertation award will be given to Minlan Yu at the SIGCOMM conference in August 2012.

During the year, six SIGCOMM members were recognized as ACM Fellows:
Ramesh Govindan, Peter B. Key, Keith Marzullo, Satoshi Matsuoka, Amin Vahdat, David Wetherall.

The following SIGCOMM members were made Distinguished Members of ACM:
Elizabeth M Belding, Sung-Ju Lee, Puneet Sharma.

The SIGCOMM Education Director Olivier Bonaventure, continues to maintain an education website (<http://education.sigcomm.org>), where members of the community are able to share education-related resources.

The SIGCOMM conference in August 2011 featured a workshop on computer networking education. The workshop combined short presentations of papers, two work sessions on "What are the networking principles" and "How to integrate experiments and simulations in a networking course." The forty attendees discussed the place of networking in the standard CS curriculums to prepare input for ACM/IEEE curricula. Olivier also ran a Shadow PC for the CoNEXT conference as a way to educate the current generation of graduate students in the best practices of technical paper reviewing and program committee operation.

SIGCOMM continues to have a Technical Steering Committee that is responsible for selecting PC chairs, crafting policies related to the PC operation and technical program, and providing a repository of knowledge about the technical aspects of the conference. Administrative and fiscal responsibility for the conference continues to reside with the SIGCOMM EC.

The CoNEXT conference is continuing to grow into a high-quality, general networking conference of comparable quality to the SIGCOMM conference. With a smaller audience than SIGCOMM, it can be a little more interactive, and has had successful panel sessions and student workshops.

The issue of how networking research can have more impact on industry continues to attract attention. Bruce Davie held a panel "Networking Research: An Industry Perspective" at the SIGCOMM 2011 conference.

An entirely new effort by SIGCOMM to engage its members is community-supported projects (<http://www.sigcomm.org/content/acm-sigcomm-community-projects>). Community-supported projects receive funding from SIGCOMM to create tools, data sets, etc. that can benefit a large fraction of the community. Two projects have been funded in the first round in April 2012. The CRAWDAD project received \$20k to continue the development of a wireless network data archive. The University of Pisa received \$20k for the development of tools for OS-independent network emulation and high speed I/O. The next round of community-supported projects will be considered for funding in October 2012.

SIGCSE FY'12 Annual Report
July 2011 - June 2012
Submitted by: Renee McCauley, Chair

This report concludes my second year as SIGCSE Chair.

1. Awards that were given out:

SIGCSE Award for Lifetime Service to the Computer Science Education Community was presented to Jane Prey, formerly of University of Virginia and Microsoft (retired).

SIGCSE Award for Outstanding Contribution to Computer Science Education was presented to Hal Abelson, MIT.

2. Significant papers on new areas that were published in proceedings

Best paper awards were given out at two of our conferences:

At ITiCSE 2011, Randy Connolly, Mount Royal University, received the Best Paper Award for "Beyond Good and Evil Impacts: Rethinking the Social Issues Components in Our Computing Curricula," which was published in the Proceedings of the ITiCSE'11: 16th Annual Conference on Innovation and Technology in Computer Science Education (Darmstadt, Germany).

At SIGCSE 2012, Jeremy Andrus and Jason Nieh, Columbia University, received the Best Paper Award for their work on "Teaching Operating Systems Using Android," which was published in the Proceedings of the 43rd ACM Technical Symposium on Computer Science Education (Raleigh, NC, USA).

3. Significant programs that provided a springboard for further technical efforts

The "TauRUs" (Taulbee Survey for the Rest of Us) project began with funding through two SIGCSE special projects. TauRUs attempts to capture data regarding the state of computer science education at non-Ph.D. granting institutions. The project has been such a success that ACM has committed funding to continue the project.

In 2011 SIGCSE was invited to participate in an initiative on Mobilizing STEM (science, technology, engineering and mathematics) Education for a Sustainable Future (<http://www.aacu.org/pkal/disciplinarysocietypartnerships/mobilizing/index.cfm>). Two SIGCSE representatives attended a May 2011 meeting that focused on the identification of projects related to student learning about sustainability. Six projects were identified with progress made in the interim through electronic meetings. SIGCSE has a representative on five of the projects. In May 2012 a SIGCSE representative attended the meeting of the entire group where project progress and results were reported.

4. Innovative programs which provide service to some part of your technical community

The Special Projects grant program has been booming this year:

August 2011: 13 proposals, 3 funded, \$7500 total

November 2011: 12 proposals, 1 funded, \$5000

Under consideration now are 15 proposals submitted during the May 15 round.

This year marked the first SIGCSE/CRA-sponsored workshop for new faculty. It was held in conjunction with the SIGCSE 2012 conference and is expected to be offered every other year.

SIGCSE continues to work closely with the Computer Science Teachers Association (CSTA) and provides CSTA meeting space at the annual SIGCSE technical symposium.

The SIGCSE technical symposium provides meeting space and access to AV and food for numerous pre-symposium events. At SIGCSE 2012, pre-symposium events included an open meeting of SIGCAS, a meeting on accreditation of computing degree programs, and workshops on Alice programming, teaching ethics through active learning and teaching open source.

Thirty-six professional development workshops were offered during the SIGCSE technical symposium.

5. A very brief summary for the key issues that the membership of that SIG will have to deal with in the next 2-3 years.

Internationalization is expected to continue to be a major focus of SIGCSE. Currently all SIGCSE board members are US residents, even though our membership and conference participants are from all over the world. Elections will be held in 2013 - there is hope that the result of these elections will improve this situation.

SIGCSE representatives are working with Informatics Europe representatives to discuss the possibility of formation of a new SIGCSE-like education conference in Europe. The ICER conference already moves from the US to Europe to Australasia on a rotating 3-year basis.

We have an Australasian "chapter" and a chapter in Turkey, and are discussing European, Indian, and Chinese expansion. Managing this growth and providing an equitable voice for these regions is a key issue for SIGCSE. SIGCSE will continue to investigate how it can serve the education needs around the world.

SIGDA FY'12 Annual Report
July 2011 - June 2012
Submitted by: Patrick Madden, Chair

Awards Given Out:

SIGDA Distinguished Service Awards
Joe Zambreno, Baris Taskin (SIGDA University Booth)

ACM Outstanding PhD Dissertation Award in EDA
to Dr. Tan Yan, UIUC

SIGDA Outstanding New Faculty Award
to Prof. David Atienza, EPFL

ACM/IEEE A. R. Newton Award to
Mustafa Celik, Altan Odabasi, Larry Pileggi (Carnegie-Mellon University)

Pioneering Achievement Award to
Robert Brayton, UC Berkeley

SIGDA Technical Leadership Award
Steve Burns, Cheng Zhuo, Chirayu Amin, Andrey Ayupov, Gustavo Wilke, Mustafa Ozadal (ISPD Gate Sizing contest), Jarrod Roy, Sudeep Pasricha, Sudarshan Banerjee, Srinivas Katkooori (SIGDA CADAthlon at ICCAD).

SIGDA Service Awards
Patrick Madden, Alex K. Jones, Srinivas Katkooori, Diana Marculescu, Igor Markov, Naheyuck Chang, Iris Bahar (outgoing SIGDA Board), Massoud Pedram (TODAES Editor)

Significant Papers

Each of our major conferences and symposia had best paper awards.

The major award for a related transaction is:

TODAES Best Paper Award to
Jason Cong, Bin Liu, Rupak Majumdar, and Zhiru Zhang. 2010. Behavior-Level Observability Analysis for Operation Gating in Low-Power Behavioral Synthesis. ACM Trans. Des. Autom. Electron. Syst. 16, 1, Article 4 (November 2010), 29 pages.

Significant Programs

University Booth: SIGDA sponsors a booth on the exhibit floor of the Design Automation Conference (DAC, the major conference in the area, with a total attendance of around 5000 people). Students from a wide range of universities have their travel expenses at least partially supported, and present their research projects alongside industry vendors. Use of videotaped demonstrations (for display on the web) was expanded; selection criteria became more competitive. The University Booth at the most recent DAC had increased visibility and attendance. The booth was moved from the exhibit floor to the front lobby a few years ago, which caused some disruption; it appears that participants and the audience have adjusted to the new location.

PhD Forum: Also at DAC are presentations from a carefully selected set of PhD dissertations. 27 students were supported to present at DAC, and were featured during the annual member meeting.

Student Research Competition: SIGDA participated in the ACM SRC again. Two winners at the conference level (which took place at DAC) were in the top three at the SRC finals.

SIGDA CADathlon: At the International Conference on Computer Aided Design (ICCAD), student teams compete in a set of design automation related programming problems. The contest is modeled after the ICPC, and attracts around twenty teams.

Innovative Programs

Visioning Workshop Preparation

Following the meetings with NSF last year, the SIGDA board prepared a visioning workshop proposal for CRA; this was funded, with Prof. Alex Jones as the lead PI. Members of the prior board are now actively working on organizing a series of three workshops to chart the course for design automation research.

The technical committees organized in prior years have continued to struggle; the new board may try to integrate these committees into the visioning workshop effort, to spur activity.

Brief Summary

SIGDA went through an election cycle, and has selected a new board. The new members are Naehyuck Chang (chair), Iris Bahar (vice-chair, and in charge of awards), Matt Guthaus (finance chair), Frank Liu (conference chair), Alex Jones (technical activities chair), Gi-Joon Nam (educational activities chair), and Patrick Madden (past chair, and communications chair).

SIGDA continues to be under financial pressure, but the downward spiral of prior years seems to have been addressed, through increases in digital library revenue, reductions in costs for DAC, and trimming the budgets of a number of programs. The new board is cautiously optimistic; the SIG still has a substantial fund balance.

DAC remains a major concern; the conference does not usually meet the target allocation levels, the management company involved in running the event is substandard, and the steering committee seems to be shortsighted in many ways. As the nature of design automation changes, DAC seems slow to respond.

SIGDA has invested in the major European conference in design automation, DATE, increasing sponsorship to 10%. The manner in which DATE is run is outside of normal ACM procedures, the DATE organizers can be non-responsive on many issues, and the return does not meet the target allocation – despite this, the board feels that DATE has strength in a number of important technical areas (in many ways, being much better positioned than DAC), and by becoming more involved in the direction of the event, feels that we can exert more influence and also grow the SIGDA community.

SIGDOC FY'12 Annual Report
July 2011 – June 2012
Submitted by: Robert Pierce, Chair

Overview

ACM SIGDOC Purpose and updates

The Association for Computing Machinery (ACM) Special Interest Group (SIG) on the Design of Communication (DOC) — ACM SIGDOC — emphasizes the design of communication for computer-mediated information products and systems. SIGDOC fosters the study and publication of processes, methods, and technologies for communicating and designing communication artifacts such as printed and online information, documentation designs and applications, multimedia and Web-based environments.

2012 has been a year of change and challenge for SIGDOC but also a year where great steps forward have been made. Because the SGB EC gave SIGDOC just a one year cycle until its next viability review, the need for rapid and effective change was deemed necessary. As such, SIGDOC board leadership changes were made soon after the EC decision was made known and a call to action was published in the quarterly newsletter in March (<http://sigdoc.acm.org/our-members/>).

Changes focused on new leadership, membership growth and fiscal policy were put immediately into place. The dialog for reaching decisions on changes included current board members, former leaders, and key members at large.

With these changes, membership growth increased (17.6%) for the first time in the past 5 years, a plan to curb costs and ensure better conference paper submissions and attendance, and the creation and engagement of new leadership positions (<http://sigdoc.acm.org/board/>) were all put into place.

ACM SIGDOC Mission Statement

<http://sigdoc.acm.org/about/>

SIGDOC's mission is to advance the state of knowledge, encourage the research, and support the interdisciplinary practice of the design of communication, particularly as related to computer-mediated information products.

The ACM Special Interest Group for Design of Communication provides a forum for the design of information communication including interface elements, information architecture, information design, documentation, and user assistance. The SIG fosters the study and publication of processes, methods, and technologies for communicating and designing these artifacts. Members include technical communication professionals, usability specialists, information architects, software engineers, educators, researchers, web designers, system developers, computer scientists, information technology professionals, and managers responsible for researching, producing, and/or supervising the creation of user interfaces, information architecture, technical materials, websites, and social media.

The mission of SIGDOC includes:

- encouraging interdisciplinary problem solving related to the [user-centered] design of informational communication
- studying and encouraging emerging modes of communication across organizations
- promoting the professional development of communication designers
- providing avenues for publication of research and exchange of best practices

- supporting the research and development of communication and processes, including applications, networks, and services

SIGDOC emphasizes the following areas of special interest to its members:

- design and evaluation methodologies that improve communication, such as user-centered and activity-centered design, participatory design, contextual design, and usability studies
- types of designed communication, including interface elements, information design, information architecture, documentation, and user assistance
- project management and content management as it relates to communication design projects
- qualitative and quantitative studies of how communications are designed and used
- practices, research, and theories relevant to any of these areas

What is Design of Communication?

Until 2003, ACM SIGDOC focused on documentation for hardware and software. With the shift in focus from documentation to the “design of communication,” SIGDOC better positioned itself to emphasize the potentials, the practices, and the problems of multiple kinds of communication technologies, such as Web applications, user interfaces, and online and print documentation.

SIGDOC focuses on the design of communication as it is taught, practiced, researched, and theorized in various fields, including technical communication, software engineering, information architecture, and usability. SIGDOC:

- Promotes the professional development of its members
- Encourages interdisciplinary problem solving related to online and print documentation and communication technologies
- Provides avenues for publication and the exchange of professional information
- Supports research that focuses on the needs and goals of humans in technological contexts, and
- Supports the development and improvement of communication technologies, including applications, interfaces, and documentation.

While the name change for the DOC portion of SIGDOC has created some degree of less clarity in the scope of SIGDOC, the mission continues to be the same and has never been more relevant to computing machinery. The previous notion of “documentation” in both academia and industry has changed more to “communication” and “user technologies.” The name change accurately reflects the realities of current changes in the practices around technical communication – whereas writers used to create hard-copy documents (“DOC”) they now design, develop, and deliver user assistance (and other forms of information, including documentation), and commonly do this for many different languages.

The newer name for what DOC represents is a good reflection of the real world of current technical communication and of how both industry and academia have modified their scope and definition of former technical communication and computer science departments.

For example, at Indiana University, Bloomington, where SIGDOC 2009 took place, there is now a School of Informatics in which Computer Science is a department. Similarly, at the University of Washington, where the 2012 conference takes place in October, the school’s technical communication department was renamed to Department of Human Centered Design & Engineering (HCDE). The focus of this school is on designing and building innovative technologies and systems - research, design, and engineering interactions between humans and technology. Technical writing is currently a certificate program and a fraction of the department’s faculty and students.

Design of communication in SIGDOC is far more relevant to informatics and human centered design and engineering than is just documentation or technical communication.

In industry, job titles were and still are changing. For example, technical writing involves so much more than writing. Technical writing is more commonly known as information development and documentation is now just one form of user assistance. Former documentation groups work in user technologies groups which includes designers and usability professionals.

So, while the spectrum of subject areas for “design of communication” is broad, and not always completely clear and fixed to all parties, it does in fact encompass the multidisciplinary aspect of what is most definitely NOT just documentation anymore, and as such makes SIGDOC an important and relevant group in ACM.

The past 5 years have seen the discussion and forum for this discussion broaden. We’ve had presentations, panels, newsletter articles, and columns on this topic, and like the Talmud, it is healthy to NOT be pinned down as a fixed entity. SIGDOC Conference attendees seem to agree.

ACM SIGDOC Officers

Rob Pierce, IBM Rational Software, USA	Chair, Newsletter Editor
Liza Potts, Michigan State University, USA	Vice-Chair
Kathy Gossett, Iowa State University, USA	Secretary/Treasurer
Jen Riehle, NC State University, USA	Information Director
Sarah Egan Warren, NC State University, USA	Student Chapter Officer
Michael Albers and Liza Potts, USA	CDQR Editors
Michael Albers, East Carolina University, USA	Graduate Competition Chair, 2011 Poster Sessions Chair
Carlos J. Costa, ISCTE, Portugal	EuroSIGDOC Chair and 2011 Program Co-Chair
Aristides Protopsaltis, Serious Games Institute, UK	2011 General Chair and European Representative
Mark Zachry, University of Washington, USA	2012 General Chair
Clay Spinuzzi, University of Texas at Austin, USA	2012 Program Chair, and Member-at-Large
David Novick, University of Texas at El Paso, USA	Senior Academic Representative

Jason Swarts, North Carolina State University, USA	Academic Representative
Kathy Haramundanis, Hewlett Packard Company, USA	Senior Industry Representative
Gerianne Bartocci, Intuitive Co., PA, USA	Industry Representative
Junia Anacleto, UFSCar, Brazil	South American Representative
Manuela Aparicio, Adetti/ ISCTE, Portugal	European Representative
Brad Mehlenbacher, NC State University, USA	Past Chair
Scott Tilley, Florida Institute of Technology, USA	Member-at-Large
Irene Frawley, ACM HQ, USA	ACM Program Coordinator

Conferences

ACM SIGDOC 2011 Conference Summary

The ACM SIGDOC 2011 29th International Conference on Design of Communication was held in Pisa, Italy. (<http://sigdoc.org/2011/>) and included collaboration and support from University of Pisa, Serious Games Institute, and University of Paris.

The conference was profitable despite its overseas location and small format. Like previous conferences, attendees cite the size as an attractive aspect of the conference and how it nurtures closer communication between attendees. The conference included a broad range of papers but was small enough to encourage lively conversations and collaborations. We'd hoped to attract attendees from the University of Pisa but that did not happen as it did in 2010 with attendees from universities in Sao Carlos, and in 2009 from attendees from Indiana University.

The conference was held at the Hotel Continental in Tirrenia from October 3-5 (<http://sigdoc.org/2011/>).

The SIGDOC 2011 Conference Committee:

- Conference Co-Chair: Aristidis Protopsaltis, The Serious Games Institute, UK
- Conference Co-Chair: Nicolas Sphyratos, University of Paris
- Program Co-Chair: Carlos Costa, ISCTE-IUL, Portugal
- Program Co-Chair: Carlo Meghini, University of Pisa

The program committee had 72 members (<http://sigdoc.org/2011/comm-pc.html>) comprising many academic and industry representatives from several different countries).

The conference call for papers attracted a wide range of papers, experience reports, workshops, and posters on the design of communication and games, organizational contexts, social media, the future of documentation, accessibility, interface design, and learning (<http://sigdoc.org/2011/schedule.html>).

This was the first year that the conference did not produce a printed version of the conference proceedings. This change is similar to what other SIGs and organizations have done and seems to be a prudent change.

The *Proceedings of the 29th Conference on Design of Communication* (ACM Press) were made available as a download to conference attendees and is also available in the ACM-DL (Digital Library) at <http://dl.acm.org/citation.cfm?id=2038476>.

Invited Speakers and Awards

Guest speakers - <http://sigdoc.org/2011/speakers.html>

Dr. Pamela M. Kato (University Medical Center Utrecht, the Netherlands) presented on serious games and how they can be used for education and training. Dr. Kato played a critical role in the design, development, and evaluation of the Re-Mission video game for young cancer patients (<http://www.re-mission.net/site/game>) and is currently serving as an Advisory Board Member for the European "Games for Health Europe" Commission.

Dr. Constantine Stephanidis, Professor of Computer Science at the University of Crete, Director of the Institute of Computer Science, Head of the Human-Computer Interaction Laboratory, and of the Center for Universal Access and Assistive Technologies, and Head of the Ambient Intelligence Programme at ICS-FORTH. spoke about natural interaction in ambient intelligent environments. Ambient Intelligence (Aml) environments emphasize the diversity of user needs, the dynamic nature of context, and the multifaceted characteristics of interactive technologies. Aml environments highlight the importance of important issues such as privacy, accessibility, security, and safety.

Using Serious Games to Improve Communication: Talking about a Revolution

Serious games engage users with video game technology and gameplay mechanics to educate and train. There is promising evidence that serious games can be used as a tool to improve communication. Evidence was presented of the impact of serious games on communication, especially in the area of games for health for young patients, and a recent serious game aimed to improve safety skills among young medical doctors was discussed. Because communication failure has been shown to be a root cause in a majority of medical errors that result in unintended deaths and injuries in hospitals, improving communication skills was a key aim of the project. Insights on why serious games can have an impact on improving communication among difficult to reach groups and how that can be done were also described.

Natural Interaction in Ambient Intelligent Environments

Constantine Stephanidis, Professor at the Department of Computer Science of the University of Crete, is the Director of the Institute of Computer Science, Foundation for Research and Technology - Hellas, Head of the Human-Computer Interaction Laboratory, and of the Centre for Universal Access and Assistive Technologies, and Head of the Ambient Intelligence Programme of ICS-FORTH.

Over the past 25 years, Prof. Stephanidis has been engaged as the Scientific Responsible in more than 50 National and European Commission funded projects in the fields of Human-Computer Interaction, Universal Access and Assistive Technologies.

In the beginning of the '90s he introduced the concept and principles of Design for All in Human-

Machine Interaction and for Universal Access in the evolving Information Society. He has published more than 550 technical papers in scientific archival journals, proceedings of international conferences and workshops related to his fields of expertise. He is the Editor-in-Chief of the Springer international journal "Universal Access in the Information Society". He is the Editor and (co-)author of 14 of the 30-chapters book "User Interfaces for All - concepts, methods and tools" published by Lawrence Erlbaum Associates (2001). He is also Editor and (co-)author of many chapters of "The Universal Access Handbook" published in June 2009 by CRC Press Taylor & Francis Group. During 1995 - 2006, he was the Founding Chair of the ERCIM Working Group "User Interfaces for All" and General Chair of its 9 international Workshops. During 1997 - 2000, he was the Founding Chair of the International Scientific Forum "Towards an Information Society for All", where he edited White Papers concerning the roadmap and R&D agenda towards an Information Society for All.

Since 2001 he has been the Founding Chair of the International Conference "Universal Access in Human - Computer Interaction". Since 2007 he has been the General Chair of the HCI International Conference that takes place every two years with around 2,000 participants.

SAP - Diana award winner - <http://sigdoc.org/2011/awards-diana.html>

SAP was the 2011 recipient of the prestigious Association for Computing Machinery Special Interest Group on Design of Communication (ACM SIGDOC) Diana Award. The Diana Award is named after Diana Patterson, past President of ACM SIGDOC. Every two years, the ACM SIGDOC gives the Diana Award to an organization, institution, or business that has made an outstanding life-time contribution to the field of communication design. Previous Diana Award winners include Adobe, IBM, RPI, W3C, Carnegie Mellon's Communication Design Center, Apple, MIT Press, and Xerox Parc. The contributions that single SAP out for the award were numerous. SAP's history of providing creative support for users of their enterprise software applications includes, for example, offering comprehensive training for its customers and improved user interfaces back in the 1980s, expanding and collaborating to meet the localized needs of different countries and corporations in the 1990s, taking the lead on e-business solutions and tailored company portals at the turn of the century and, up to the present, winning numerous awards as best place to work while developing 360 customer environments that continue to engage their growing customer base.

We were honored, at ACM SIGDOC 2011, to have two representatives from SAP, Dr. Anja Kellerman and Dr. Sven Leukert, receive the Diana Award and to talk about communication design challenges and opportunities for the future. Dr. Anja Kellerman has a background in language training and linguistics and holds a PhD in sociolinguistics. She joined SAP in 1997 as a technical writer documenting financial business applications and has since moved into managing documentation projects and teams of technical writers and translators in various development areas of SAP. Today she is head of the knowledge management team in the development of areas that drive innovation and standardization for SAP. Dr. Sven Leukert has been with SAP since 1998, after completing his PhD in mathematics at UNC Chapel Hill in North Carolina (USA). At SAP, he started out in a product management role and, since, has moved into a management role, focusing on knowledge management, documentation, and translation. He is currently responsible for the technical documentation in the Technology and Innovation Platform board area, leading teams around the globe.

Planning for future conferences

To stem potential loss of opportunity for existing members to attend the annual conference, changes were made to promote more domestic conference activity. A new leader to help with student chapter creation was also appointed, who will be giving a presentation at the 2012 conference.

- ACM SIGDOC 2012, to be held in October at the University of Washington, Seattle, WA
- ACM SIGDOC 2013, to be held in September at Coastal Carolina University, Conway, SC. This domestic location was agreed upon once we decided that the annual conference needed to be kept closer to where the majority of SIGDOC members reside.
- SIGDOC conference planned to be held in October, 2013 at Waseda University, Kyoto, JP – Was originally planned to be the ACM SIGDOC 2013 conference but due to membership, finances, and viability concerns we determined this location was not feasible. We've proposed that this conference become an AsiaSIGDOC conference or Pan-Pacific ACM SIGDOC conference but not yet clear these alternatives will be acceptable.

Chapters

SIGDOC has active chapters and plans are in progress for new regional and student chapters. Efforts are currently underway for establishing a new AsiaSIGDOC chapter as well as new student chapters at Michigan State and Iowa State.

EuroSIGDOC: ACM SIGDOC European Chapter <http://eurosigdoc.acm.org/>

EuroSIGDOC has now hosted workshops on Open Source and Design of Communication in Lisbon, Portugal for the past 3 years. (<http://eurosigdoc.acm.org/osdoc2010/> , <http://eurosigdoc.acm.org/osdoc2011/> , <http://eurosigdoc.acm.org/osdoc2012/>

EuroSIGDOC was featured in ACM chapter news - <http://europe.acm.org/mn-europe/>

"In this issue we feature EuroSIGDOC, a group of researchers and practitioners pursuing the SIGDOC mission in a European context. SIGDOC is ACM's Special Interest Group on the Design of Communication. Like SIGDOC, EuroSIGDOC focuses on the design of communication as it is taught, practiced, researched, and conceptualized in various fields, including technical communication, software engineering, information architecture and usability.

On June 11 the chapter is sponsoring the Open Source and Design of Communication (OSDOC2012) workshop and the Information Systems and Design of Communication (ISDOC2012) workshop in Lisbon. At both workshops, researchers and practitioners will have opportunities to exchange information in areas relevant to the design of communication, processes, methods, and technologies for communicating and designing communication artifacts such as printed documents, online text, and hypermedia applications.

New student relations leadership – Sarah Egan Warren, at NC State.

We now have a student chapter leader who will help drive and support the creation of new student chapters. See, <http://sigdoc.acm.org/about/student-chapters/>

See also, SIGDOC at NC State University (<http://ncsu.orgsync.com/org/sigdoc>)

Programs and Services

Many new efforts are underway to address the need for an immediate call to action based on the most recent SIGDOC viability review.

Other activities now in place: New website, new journal-like newsletter, now making all back issues of the newsletter available in the DL, reinvigorated and expanded leadership, new student chapter leadership and web page resources, significant membership growth by email offer to former members, new efforts to expand sponsorships for greater SIGDOC visibility (ATTW is the best example) and also sponsorship of DocEng2012.

In addition to annual conferences, maintaining a website and publishing a quarterly newsletter, ACM SIGDOC is also actively engaged in various social media spaces (for example, Facebook, LinkedIn, Slideshare, Twitter, and Wikipedia).

Membership

ACM SIGDOC Membership

ACM SIGDOC began FY 2012 with 187 members and currently now has 220 members.

This is the first membership increase in several years and bodes well for future improvements. This new membership number indicates a significant increase (17.6%) for 2012 membership growth despite dwindling membership over several previous years also seen in similar organizations.

The membership increase is largely due to an offer we made to the more than 1000 former members to rejoin SIGDOC. We'll continue to use this mechanism each year, in the hope of attracting former members.

Membership brochure made available on our Website:

<http://sigdoc.acm.org/wp-content/uploads/2011/11/sigdocBrochure-press.pdf>

Website

New in FY 2012 is new and much improved SIGDOC Website. This site now offers a more collaborative environment for member contributions. It also has updated and improved history, mission statement, and membership benefits sections, in part to try attracting more people to join SIGDOC (<http://sigdoc.acm.org/join/>) in addition to encouraging existing members to volunteer (<http://sigdoc.acm.org/members/get-involved/>).

The SIGDOC Board continued to focus on strategies for addressing membership numbers. We agreed to aim at encouraging greater graduate student/campus involvement, to establish international collaborations and membership, and to reach out to the broader communities of writers, information engineers, technical communicators, and information technology professionals working with information.

ACM SIGDOC Publications

The ACM SIGDOC quarterly newsletter is made available on the SIG website and as of 2012 is also now available in the ACM digital library.

Release of the newsletter is announced each quarter via the ACM SIGDOC members' listserv and is available in general via the ACM SIGDOC website (<http://sigdoc.acm.org/publications/newsletter/>). Archived versions of all past newsletters are also now available in pdf format on the ACM digital library.

The newsletter consists of news from members (notes from the chair and from the general conference chair), future conference information, interesting items, feature articles, and job market information.

For the available past newsletters on the ACM digital library, see the Table of Contents tab from here:

<http://dl.acm.org/citation.cfm?id=J1351&CFID=125274874&CFTOKEN=16792716>

Communication Design Quarterly Review

New in 2012 will be the transition from the newsletter of the past 12 years to a newer journal-like format, the Communication Design Quarterly Review. The first new format newsletter will be made available in September.

See, <http://sigdoc.acm.org/publications/>

Key issues for next 2-3 years

Key Issues for ACM SIGDOC in coming year include:

- Support the development of new (regional and student) SIG chapters (such as EuroSIGDOC and NC State University), and develop policies for managing them effectively and for increasing SIG chapter activities. Having a student chapter leader should help these efforts.
- Now that we've completed the development of a more collaborative environment for the new ACM SIGDOC web pages, we need to drive the use of it, especially for leaders to share tips, experiences and lessons learned from previous conferences for current and upcoming conference leaders.
- Serve the needs of our current members and find ways to increase our membership by attracting new members, volunteers, and board officers. Good efforts were made in 2012 and lessons were learned that should help continue to drive future improvements.
- Launch and support Communication Design Quarterly Review (CDQR), our redesigned and much more robust newsletter for cutting edge research in the design of communication.
- Nurture publication of papers in newer focus areas both for theory and practice such as learning resources and design of communication for a wider diversity of audiences and contexts in terms of culture, language, education, and economic resources.

SIGecom FY'12 Annual Report
July 2011 - June 2012
Submitted by: David Parkes, Chair

SIGecom's three primary activities are its annual Conference on Electronic Commerce (EC), its electronic newsletter SIGecom Exchanges, and its new journal, ACM Transactions on Economics and Computation (TEAC).

Outgoing officers, David Pennock (MSR, Chair), Joan Feigenbaum (Yale, Vice Chair) and Amy Greenwald (Brown, Secretary-Treasurer) have provided strong and careful guidance in recent years. The new SIG officers are David Parkes (Harvard, Chair), Tim Roughgarden (Stanford, Vice Chair) and Yiling Chen (Harvard, Secretary-Treasurer).

The Thirteenth ACM Conference on Electronic Commerce (EC'12) was held June 4-8, 2012 in Valencia, Spain, and co-located with the Eleventh International Conference on Autonomous Agents and Multiagent Systems (AAMAS'12). This was our first co-location with AAMAS and our first EC conference held outside of North America. The Program co-Chairs were Kevin Leyton-Brown (UBC) and Panos Ipeirotis (NYU Stern) and the General Chair was Boi Faltings (EPFL).

Over 170 people attended, only slightly fewer than in 2011 when the conference was held in conjunction with FCRC in San Jose. The healthy attendance combined with substantial corporate support, including from Google, Yahoo! Labs and Microsoft Research, made this a financial as well as a technical success. The conference attracted 219 submissions, a record, from authors in academia and industry around the world.

After discussion and deliberation among the PC, SPC and Program co-Chairs, 73 papers were selected for presentation, with 57 of these published in the proceedings. The remaining 16, at the authors' request, are abstracts with pointers to full working papers. This option accommodates the publishing practices of fields outside of computer science, and in particular economics in the case of ACMEC, where conference publishing can preclude journal publishing. Four workshops were associated with EC'12: two new workshops and two workshops with long-term affiliations with EC. 5 informative tutorials on current topics, including mean-field equilibria (R. Johari, Stanford) and Diffusion of networking technologies (S. Goldberg, BU) rounded out the program. Over 100 people attended the workshops and tutorials. Moshe Tennenholtz (MSR and Technion) and Colin Camerer (CalTech) gave joint EC/AAMAS plenary talks.

We had a very strong technical program, covering a range of topics from core theoretical foundations to practical innovations in areas such as advertising and recommender systems. Topics covered included areas of typical strength, such as equilibrium computation, mechanism design, Internet advertising, and auctions. Significant papers included those in emerging areas, such as experimental work; e.g., "Cooperation and Assortativity with Endogenous Partner Selection" by J. Wang, S. Suri and D. J. Watts, where crowdsourcing of subjects enabled a study of the effect on the stability of cooperation of allowing users to make or break partnerships in strategic settings. Other papers made progress on long-standing themes, such as "The Price of Anarchy in Games of Incomplete Information" by T. Roughgarden, and "The Computational Complexity of Truthfulness in Combinatorial Auctions" by S. Dobzinski and J. Vondrak. A paper "The Groupon Effect on Yelp Ratings: A Root Cause Analysis," by J. Byers, M. Mitzenmacher and G. Zervas, studied the (negative) effect of Groupon deals on Yelp ratings, and attracted significant media attention including NPR, the NY Times and Time magazine.

Two papers received the EC'12 Best Paper Award: "Improving the Effectiveness of Time-Based Display Advertising" by D. Goldstein, R. P. McAfee and S. Suri, and "Payment Rules through Discriminant-Based Classifiers" by P. Duetting, F. Fischer, P. Jirapinyo, J. Lai, B. Lubin and D. Parkes. The EC'12 Best Student Paper Award went to "Symmetries and Optimal Multi-Dimensional Mechanism Design" by C. Daskalakis and S. M. Weinberg.

We introduced new structure to the conference this year, with three “theory and foundations”, “artificial intelligence” and “experimental and applications” areas, moving to 1.5 parallel tracks, and introducing lightly reviewed posters (22 posters appeared.) These innovations were designed to strengthen the interdisciplinary nature of EC, along with signal interest across these areas, and to support our mission of serving the wider and growing discipline. These changes gained broad support in the business meeting held at the conference. Next year's Program co-Chairs, Preston McAfee (Google) and Eva Tardos (Cornell University), will aim to continue this momentum, in conjunction with Michael Kearns (University of Pennsylvania) as General Chair. EC'12 will be held in Philadelphia PA, and is tentatively scheduled for June 16-20, 2013.

In order to serve as a hub for the growing number of researchers and venues at the intersection of computer science and economics, the SIG continues to work to establish in-cooperation agreements with high quality related conferences and workshops. For the 2011-12 year, we had in-cooperation agreements with ACM RecSys, the Symposium on Algorithmic Game Theory (SAGT), and Auctions, Market Mechanism and Their Applications (AMMA). In addition, the SIG provided support for students to attend the New York Computation and Economics (NYCE) day, which was complemented for the first time this year with a Cambridge Area Economics and Computation (CAEC) day.

The newsletter, "SIGecom Exchanges", is published twice per year as a free online resource for members and others. The outgoing Editor-in-Chief, Yiling Chen (Harvard), produced two strong issues this year, including survey articles written by invited leaders in the field. We observed the effectiveness of incentives when a bounty for a puzzle led to two solutions within 12 hours. The incoming EiC is Ariel Procaccia (CMU), Yiling will help with the transition, and Felix Fisher (U. Cambridge) continues to serve as Information Directory for both Exchanges and the SIG.

The SIG plays a significant role in the new ACM journal on Economics and Computation, which was launched August 2011 following dedicated work by outgoing officers David Pennock and Joan Feigenbaum. The two EiCs are Preston McAfee (Google), and Vince Conitzer (Duke), and there is an active, high quality global editorial board. The journal is serving the role that we anticipated, and as of early June we had received 42 submissions and accepted 9 papers. We are thrilled to have a journal outlet for research at the intersection of computer science and economics, the first of its kind.

This year was an exciting year for people in the SIG's community receiving awards, including: the 2012 ACM Gödel prize, going to E. Koutsoupias and C. Papadimitriou (worst-case equilibria), T. Roughgarden and E. Tardos (selfish routing), and N. Nisan and A. Ronen (algorithmic mechanism design); the 2012 ACM/SIGART Autonomous Agents Research Award, going to M. Tennenholtz; and the 2012 IFAAMAS Influential Paper Award going to M. Wellman (“market-oriented programming).

In ongoing business, we are close to finalizing our policy for:

- (a) the EC Best Paper Award and EC Best Student Paper Award
- (b) an EC best Ph.D. dissertation Award at the intersection of computer science and economics.
- (c) a test-of-time award.

The main challenge for next 2-3 years is to maintain our strength in research at the intersection of economics and computer science and at the same time keep connected to practice, while continuing to find paths to encourage more application-related contributions in the conference program. Maintaining this balance and reaching out for opportunities in emerging areas will be a key focus of the conference officials for next year and beyond.

SIGEVO FY'12 Annual Report
July 2011 - June 2012
Submitted by: Wolfgang Banzhaf, Chair

LEADERSHIP OF SIG

SIGEVO, the SIG on Genetic and Evolutionary Computation, had an unchanged Executive Committee of 18 members for this year. Next elections are going to be held early next year renewing 1/3 of the board.

This was the first year of activity of newly elected officers Wolfgang Banzhaf (chair), Una-May O'Reilly (vice chair), Franz Rothlauf (treasurer) and Marc Schoenauer (secretary).

The first business meeting of the Executive Committee under the new leadership was held in Philadelphia, at the occasion of GECCO-2012 on July 9, 2012.

BUSINESS MEETING IN PHILADELPHIA

Since GECCO 2012 is formally outside the report period, I shall only report on the results of the business meeting. Besides the EC, the chairs and E-i-Cs of the 2012 and the 2013 GECCO conferences were invited. Also in attendance was the E-i-C of the MIT Press Journal Evolutionary Computation which is closely affiliated with the SIG.

The following decisions were made at the meeting:

- Free registration will be offered to ACM-W selected graduate students (number tbd)

- Leadership for GECCO 2014 is in place, with venue being selected within North America

- SIGEVO will carefully study the possibility of holding a GECCO soon in the Asia/Pacific region.

- Japan was singled out as the most probable candidate country.

- The FOGA workshop series needs help from ACM. It is not a big event, so small-scale would do. Chair will talk to ACM. In the future, student travel to FOGA will be sponsored by SIGEVO.

- Due to impact factor considerations, SIGEVO will make a renewed effort to keep all GECCO proceedings in the ISI Web of Science database. GECCO is in for years with other publishers, but not with ACM. So ACM help is required.

- The new wiki collaborative site has been started, and is actively used to redesign the SIGEVO website. These efforts will become visible within a month, as the website will switch to the public side of the wiki.

- Efforts will be made to nominate SIGEVO members to ACM awards. As well, an ad-hoc award committee will be formed by the chair to study the way forward on awards given by the previously independent ISGEC organization, as well as on new awards to be given out by SIGEVO.

- SIGEVO anticipates to hold Summer Schools on dedicated topics that allow interaction with other sub-disciplines. Details will depend on individual proposals.

GECCO 2011

GECCO 2011 was held in Dublin, Ireland, in July 2011. Since a few years, GECCO alternates between a venue in the US or North America and a venue in Europe. The Dublin conference was extremely successful in receiving almost 700 submissions, with attendance of approximately 600 individuals. Acceptance rate for GECCOs has hovered for a long time at around 40%, but was 38 percent for this GECCO. General Chair of GECCO 2011 was Pier-Luca Lanzi (Milano) and E-i-C was Natalio Krasnogor (Nottingham). Attendance is usually greater when the conference is held outside the US. Due to the way the budget and economies work, we also can afford more amenities for attendees outside the US. This was received well at the Dublin event. GECCO 2011 was the first

conference where we worked with Executive Events as conference management. Both sides learned a number of things during this year of experimenting with the new way of managing the conference.

We shall continue to internationalize our flagship conference, both in terms of leadership as well as in terms of venues.

FUTURE GECCOS

Briefly: GECCO 2012 was recently held in Philadelphia with about 440 attendees, a quite successful event (37% acceptance rate). Executive Events has now firmly established itself as our conference management organization of choice.

GECCO 2013 planning has begun seriously. The venue will be in Amsterdam, the Netherlands, where we have chosen to hold the conference in facilities of the Free University of Amsterdam. GECCO 2014 is currently in the hotel bidding process. For future GECCOs, we shall have a venue solicitation process in place, mainly for issues of local organization outside the US. This will allow us to be more globally active.

FOGA 2013

Planning is well under way for the next Foundations of Genetic Algorithms (FOGA) workshop. It will be held in Adelaide, Australia, in January 2013, organized by Frank Neumann (U Adelaide) and Ken de Jong (GMU).

SIGEVO FINANCES

SIGEVO is in good shape financially, with events usually not producing deficits. Our reserves are healthy, and we are looking at ways (cf. Award ad-hoc Committee) to use surplus for rewarding our membership through higher visibility.

Student support at GECCO has been steady at approximately \$20K per year.

For an interim period, the budget for our online presence (web-design, etc) has been increased. We anticipate that costs will stabilize, but felt that the online presence is one of the most important windows of the organization which needed some more attention.

AWARDS

For the second time, the "SIGEVO Impact Award" was given to recognize up to 3 high impact papers that were published in the GECCO conference proceedings 10 years before. Criteria for selection are high citation counts and impact deemed to be seminal. Selection is made by the SIGEVO Executive Committee.

This year the Impact Award was given to

A Racing Algorithm for Configuring Metaheuristics.
Genetic and Evolutionary Computation Conference, 2002.
M. Birattari, T. Stuetzle, L. Paquete and K. Varrentrapp

Several competitions were held at GECCO-2011 with awards presented at the SIGEVO Annual Meeting. A report was provided already with the last FY year report.

SIGGRAPH FY'12 Annual Report
July 2011 - June 2012
Submitted by: Jeff Jortner, President

1. Awards

ACM SIGGRAPH presented its 2011 awards during the Keynote session at SIGGRAPH on Monday, August 8, in Vancouver.

- Steven Anson Coons Award: Jim Kajiya
- Computer Graphics Achievement Award: Richard Szeliski
- Significant New Researcher Award: Olga Sorkine
- Award for Lifetime Achievement in Digital Art: Charles Csuri

The SIGGRAPH 2011 Computer Animation Festival presented a total of 77 films during the Festival. In addition to film screenings, the Festival included interactive sessions and exclusive learning opportunities to gain industry secrets and advice from some of the most successful professionals in the field.

SIGGRAPH 2011 Computer Animation Festival award winners included:

- **Best in Show Award: The Fantastic Flying Books of Mr. Morris Lessmore**
Directed by William Joyce and Brandon Oldenburg, Moonbot Studios
- **Jury Award: Paths of Hate**
Directed by Damian Nenow, Platige Image
- **Best Student Project Prize: Flamingo Pride**
Directed by Tomer Eshed, The Konrad Wolf Potsdam-Babelsberg Film and Television University

2. Significant papers on new areas that were published in proceedings

SIGGRAPH 2011 featured 82 Technical Papers and SIGGRAPH Asia featured 67 Technical Papers. In addition to core topics of modeling, animation, rendering, imaging, and human-computer interaction, the Technical Papers program encouraged submissions from areas related to computer graphics, including: computer games, design, vision, scientific and information visualization, audio, and robotics.

3. Significant programs that provided a springboard for further technical efforts

SIGGRAPH

SIGGRAPH 2011, the world's premier conference on computer graphics and interactive techniques, welcomed 15,872 artists, research scientists, gaming experts and developers, filmmakers, students, and academics from 74 countries around the globe to Vancouver - breaking the city's previous conference attendance records. In addition, 156 industry organizations exhibited at SIGGRAPH 2011 - representing 17 countries with approximately half from outside the United States.

Content was once again king at SIGGRAPH with approximately 825 speakers participating in the conference through a variety of talks, sessions, panels, papers, presentations, and screenings.

SIGGRAPH Symposium

In conjunction with the 2011 conference, SIGGRAPH launched a business symposium: The SIGGRAPH Symposium: The Business Think Tank. This one-day event was designed for people in the business of the business, leaders of our global community, the visionaries who define the direction of our industry. It brought together the leaders who have contributed to the direction, production, and evolution of the computer graphics community, a powerful global presence whose members are interconnected and interrelated.

SIGGRAPH Asia 2011

The 4th ACM SIGGRAPH Asia Conference and Exhibition brought together over 7,500 computer graphics professionals, researchers and enthusiasts, hailing from 53 countries across the globe. SIGGRAPH Asia 2011 once again proved itself to be one of the leading platforms for computer graphics and interactive techniques, featuring renowned pioneers including Bill Buxton, Principal Researcher at Microsoft Research; Don Greenberg, Director, Cornell University Program of Computer Graphics; Ken Perlin, Director of the New York University Center for Advanced Technology; Paul Debevec, Associate Director, Graphics Research, University of Southern California; and Robert Neuman, Stereoscopic Supervisor at Walt Disney Animation Studios. In all, over 300 presentations as well as panel discussions and talks were held across the programs, generating robust discussions and deep insights on current and future developments in the field of computer graphics and interactive techniques.

Symposium on Apps

The Symposium on Apps featured panels, presentations, talks and displays on leading-edge works relating to mobile application development, as well as the computer graphics software and hardware to support today's mobile devices.

Symposium on Apps was an inaugural program at SIGGRAPH Asia 2011 in Hong Kong to introduce the opportunities and challenges of mobile applications development to the global graphics community.

The program educated and explored how visual and animation techniques can be used on mobile devices to create compelling end user experiences and to drive the use of advanced graphics capabilities on billions of new devices.

Notably, several sessions at the Symposium on Apps program were focused on mobile augmented reality applications, in tandem with increasing interest in how mobile devices are opening up new opportunities for merging real and virtual worlds. Augmented reality was also a pervasive topic across the conference, featured in the Art Gallery, Emerging Technologies and Technical Sketches and Posters programs.

4. Innovative programs which provide service to some part of your technical community

Digital Arts

The Digital Arts Committee's social networking site (Ning) has reached nearly 700 members. Of these, 238 report as being official SIGGRAPH members. The activity level on the Ning Social site remains high. There are currently over 2900 artists' works that have been uploaded. Approximately 350 of these are videos; the rest are still images and installation works.

The Digital Arts Committee launched its first juried online ACM SIGGRAPH Arts Show, with the DAC Committee board members serving as jurors. The show was launched in May, 2012 and can be seen via the main arts.siggraph.org site, or specifically at <http://arts.siggraph.org/environment/>. Thirteen artists were chosen from those who submitted via the DAC NING site. Each artist has two works displayed.

Education

One of the major objectives of the ACM SIGGRAPH Education Committee is to help establish a worldwide network of computer graphics educators. Our international ACM SIGGRAPH Education Committee members have active roles in the planning and organization of education-related Computer Graphics events in several countries, which offers an excellent opportunity for us to exchange information and promote our ACM SIGGRAPH educational activities worldwide.

The Eurographics Education Papers were held on May 17th, 2012, at the Eurographics 2012 conference in Cagliari, Sardinia. The SIGGRAPH Education committee works with Eurographics on this program.

On May 19, 2012, a „Visualization Curriculum Workshop“ was held at the University of Cagliari, Sardinia, sponsored by the SIGGRAPH Education Committee. It was a follow-up on the Visualization Curriculum Panel at Eurographics 2012. Participants were David Ebert, Beatriz Sousa Santos, Holly Rushmeier and Gitta Domik.

In 2011-2012 ACM SIGGRAPH Education Committee initiatives were promoted at the following conferences and events held in Brazil:

- SIIMI - 1º Simpósio Internacional de Inovação em Mídias Interativas (*First International Symposium of Innovation in Interactive Media*), 9-11 May 2012
- Academia Digital (*Digital Academia*) – a seminar held at Casa da Ciência, at Rio de Janeiro’s Federal University, on 25 May 2012, organized by the Programa Avançado de Cultura Contemporânea (*Advanced Program on Contemporary Culture*).
- Projeto “ARTE COM CIÊNCIA” (*“Art with Science” Project*) - Sergipe, Northeast of Brazil, October 2011

Student Services

Student Services Committee provided resume/portfolio reviews for about 130 students at SIGGRAPH 2011. In addition, S3 is expanding its web presence with an S3 Drupal site. The committee also provided education webinars to past student volunteers.

Communications

ACM SIGGRAPH introduced its monthly e-newsletter Interactions in October 2011. This monthly touch-base with the members includes information on upcoming conference and chapter events, elections, and awards. Social Media remains a major priority for Communications as we continued to keep all of our social media channels up to date, fresh and interactive. We have added several channels since the conference last year including new Facebook Fan pages for the organization and a Google+ page. The Communications Committee has also become admins for the SV and Computer Animation Festival (CAF)’s Facebook Fan pages and has been helping them to maintain, update and keep their feeds in compliance. Our social media channels have truly grown in the past year and have hit several milestones. They have become a great way of reaching our membership as well as fans of the conference and organization. It has also been show that our feeds/channels

have had a great influence on submissions for the conferences. Current numbers for the feeds the Communications Committee maintains daily are as follows:

- Twitter has 12,351 followers; In 2011 we had 7,849.
- Facebook (SIGGRAPH Conferences) has 9,620 fans; In 2011 we had 6,179.
- Facebook (ACM SIGGRAPH Group) has 2,559 members; In 2011 we had 2,306.
- Facebook (ACM SIGGRAPH – New!) has 173 fans.
- LinkedIn has 6,772 professionals in our group; In 2011 we had 4,814.
- YouTube channel has 2,669 subscribers and 927,514 views; In 2011 we had 1,557 subscribers and 48,312 views.
- Tech Papers 2012 Preview has 137,833 views alone.
- Google+ (ACM SIGGRAPH – New!) is in 89 circles.

Chapters

ACM SIGGRAPH has a total of 50 Chapters (16 of which are student Chapters). We estimate that there are about 380 ACM members spanning these. It is important to note that not all Chapters report how many of their members are also members of ACM, so this may be a conservative estimate.

A summary of various Chapter matters is listed below:

- ⤴ Chapter Web Sites - All chapter Web Sites are cataloged and reviewed to ensure that they meet the standards and regulations that had been previously set by the committee.
- ⤴ Chapter Social Media - All social media sites set up by individual Chapters are located, reviewed and cataloged. A document was started setting up rules and regulations for the Chapters who are choosing to use social media to support themselves, including instructions and suggestions for what to do.
- ⤴ Chapter Buddies - Buddies are assigned for to every Chapter and a new set of interaction policies was established. A calendar of buddy/chapter interactions and key dates was created and template emails were drafted. These have been used as the basis for communications with Chapters.
- ⤴ The Associate Membership program is under discussion including a review of which Chapters are participating, the benefits, and a walk-thru of the online system.

5. Key issues that the membership of that SIG will have to deal with in the next 2-3 years.

ACM SIGGRAPH is looking to better position the organization for the future given the trends impacting the industry, membership organizations and our community member's lives. We have long had a reputation for excellent and exciting content. We want to build on our past success by adding programs that invite broader and more active participation from members. To accomplish this we will build an integral relationship with our community that delivers the information, networking and education they want, how and when they want it.

SIGHIT FY'12 Annual Report
July 2011 - June 2012
Submitted by: Gang Luo, Chair

SIGHIT is a new SIG. It is concerned with the application of computer science principles, information science principles, information technology, and communication technology to address issues in healthcare and the delivery of healthcare services as well as the related social and ethical issues. SIGHIT emphasizes the computing and information science-related aspects of health informatics and provides a forum for the creation, sharing, and management of knowledge and techniques as a strategic resource for improving the field of health informatics and its impact on people's lives.

1. Awards that were given out

IHI 2012 Best Paper Award

Robust Discovery of Local Patterns: Subsets and Stratification in Adverse Drug Reaction Surveillance

Johan Hopstadius, G. Niklas Noren

IHI 2012 Best Student Paper Award

An Evaluation of Measures to Dissociate Language and Communication Disorders from Healthy Controls Using Machine Learning Techniques

Judith Gaspers, Kristina Thiele, Philipp Cimiano, Anouschka Foltz, Prisca Stenneken, Marko Tscherepanow

2. Significant papers on new areas that were published in proceedings

In IHI 2012 proceedings, some of the published outstanding papers are listed as follows:

- I) The IHI 2012 Best Paper: "Robust Discovery of Local Patterns: Subsets and Stratification in Adverse Drug Reaction Surveillance" by Johan Hopstadius, G. Niklas Noren
- II) The IHI 2012 Best Student Paper: "An Evaluation of Measures to Dissociate Language and Communication Disorders from Healthy Controls Using Machine Learning Techniques" by Judith Gaspers, Kristina Thiele, Philipp Cimiano, Anouschka Foltz, Prisca Stenneken, Marko Tscherepanow
- III) "Using SMS to provide continuous assessment and improve health outcomes for children with asthma" by Tae-Jung Yun, Hee Young Jeong, Tanisha D. Hill, Burt Lesnick, Randall Brown, Gregory D. Abowd and Rosa I. Arriaga.
- IV) "Mobile Interface Design for Low-Literacy Populations" by Beenish Chaudry, Katherine Connelly, Katie Siek and Janet Welch.
- V) "MARHS: Mobility Assessment System with Remote Healthcare Functionality for Movement Disorder Diseases" by Sunghoon Lee, Jonathan Woodbridge, Ani Nahapetian and Majid Sarrafzadeh.
- VI) "A Probabilistic Imputation Framework for Regression Analysis using Variably Aggregated, Multi-source Healthcare Data" by Yubin Park and Joydeep Ghosh.

3. Significant programs that provided a springboard for further technical efforts

SIGHIT sponsors the ACM SIGHIT International Health Informatics Symposium (IHI). The second conference, IHI 2012, attracted about 220 attendees, about 300 submissions from 38 countries, and financial support from seven institutions/companies. IHI 2012 introduced three paper tracks: analytics, systems, and human factors, as well as tutorials, doctoral consortium, and non-referred extended abstracts. Tutorials were available to IHI'12 attendees for free.

The second issue of the SIGHIT newsletter, SIGHIT Record, appeared in September 2011 with 30 pages of content (<http://dl.acm.org/citation.cfm?id=2047478>). The third issue of SIGHIT Record appeared in March 2012 with 30 pages of content (<http://dl.acm.org/citation.cfm?id=2180796>). The newsletter is available to SIGHIT members as their membership benefit.

4. Innovative programs which provide service to some part of your technical community

SIGHIT has established the SIGHIT resource repository at <http://www.sighit.org/resources.php> to provide a set of links of general interest to the community.

SIGHIT has started the sighit-members@acm.org email list, which allows un-moderated and direct discussions among the SIGHIT membership.

Several health informatics PhD and Master's theses have been newly added into the SIGHIT theses repository at <http://www.sighit.org/thesis.php>.

5 A very brief summary for the key issues that the membership of that SIG will have to deal with in the next 2-3 years.

We will try our best to perform the following tasks:

- (1) Identify new SIGHIT leadership.
- (2) Attract new SIGHIT members and new IHI conference attendees.
- (3) Make SIGHIT and IHI more internationalized. Compared to IHI 2010, IHI 2012 has many more international people in the program committee and conference organization. We will strive to make this trend continue in the next few years so that more people in more geographic/research areas can get to know SIGHIT and IHI.

SIGHPC FY12 Annual Report
November 2011-June 2012
Submitted by Cherri M. Pancake, Chair

SIGHPC's mission is to promote the advancement of the field of High Performance Computing. It focuses on HPC in the broadest sense of the term – spanning the full range of high-performance technologies, systems, and applications. The HPC community encompasses an extremely wide variety of organizations and individuals engaged in studying, developing, teaching, and supporting high-performance computing, storage, networking, software, and systems. It also includes the even wider range of people engaged in applying HPC across a broad spectrum of scientific, engineering, and business domains.

SIGHPC was formed in November 2011, so this report summarizes activities during its first 7 months of operation.

Officers and Advisers

As of June 30, 2012, the following individuals serve as the transitional officers until the first elections (scheduled for 2013).

Chair	Cherri Pancake, Oregon State U (SC99 chair)
Vice-Chair	Jeff Hollingsworth, U Maryland (SC12 chair)
Treasurer	Becky Verastegui, Oak Ridge NL (SC07 chair)
Appointed Officers: Newsletter Editor Member Communications Student Programs	Bill Gropp, UIUC (SC13 chair) John West, DOD HPC Modernization Program Barbara Horner-Miller (SC06 chair)
Advisory Board:	Paul Fussell, Boeing Dona Crawford, Lawrence Livermore NL (SC97 chair) Jack Dongarra, U Tennessee Satoshi Matsuoka, Tokyo Inst of Tech Ron Perrott, Queen's U Belfast Wilf Pinfeld, Intel (SC09 chair)
Other Directors: Member Recognition Workshops & Meetings Community Calendar	Jack Dongarra, U Tennessee Christine Cuicchi, DOD HPC Modernization Program Doug Fuller, Oak Ridge NL

Awards

SIGHPC does not current offer any awards. We have initiated discussions with a partner group and hope to establish our first during the next year.

Conferences

SIGHPC is now a 50% co-sponsor with SIGARCH of the annual SC conference. This arrangement begins with SC12, to be held in November 2012.

A key activity during our first few months was to establish internal procedures and guidelines for co-sponsorship and in-collaboration arrangements with conference and workshops. They resulted in three in-collaboration events:

- The ATIP /A*CRC Workshop on Accelerator Technologies in High Performance Computing was held in collaboration with SIGHPC in Singapore, May 7-10.
- The second in-collaboration event was the 2012 International Workshop on Runtime and Operating Systems for Supercomputers, held on June 29 in conjunction with ICS 2012 in Venice
- The Extreme Scaling Workshop 2012, to be held in Chicago July 15-16, 2012, will be the third event to be held in collaboration with SIGHPC.

We declined three other requests, using the experiences to refine our guidelines. The procedures and guidelines, as well as a template for proposing in-collaboration events, have been made available on the SIGHPC website.

Membership

In its first months, SIGHPC has dramatically exceeded the membership goals in our 5-year plan. By the end of June, we had over 925 members, a number originally targeted for midway through FY14.

Our social media outlets (see "Innovative Programs") have also attracted a significant following:

- Facebook: 645 group members, 230 "likes"
- Twitter: 199 followers
- LinkedIn: 682 group members

Innovative Programs

As part of the initiation of SIGHPC, we developed a SIGHPC visual identity and website, as well as the attendant publicity materials (mission statement, downloadable membership poster, etc.) The materials were also used as the basis for a SIGHPC exhibit booth design, which debuted at the SC11 conference in Seattle, Nov. 12-18. The booth was staffed by early members, whose enthusiastic efforts resulted in over 300 new members by the end of the conference. The reusable, transportable booth was professionally designed and donated to SIGHPC. A professionally designed membership brochure was printed for distribution. The costs were donated, as were those for promotion buttons and membership signup giveaways.

Social media outlets were established on Facebook, Twitter, LinkedIn, and YouTube. In the absence of established ACM policies regarding participation and usage of social media, SIGHPC investigated the practices of other organizations and developed a set of policies and guidelines. We developed electronic "badges" that members can adopt for their own websites and social media pages, including a set of guidelines governing the use of the "I'm in SIGHPC" graphical badge. SIGHPC also worked with The Exascale Report, an industry publication, to obtain a deeply discounted price on subscriptions for our members. Because publication agreements are handled at the level of ACM, all ACM members actually benefit from the arrangement.

Digital Library

The proceedings of the ATIP /A*CRC Workshop on Accelerator Technologies in High Performance Computing were uploaded to the DL in June and will soon be made available to our members. SIGHPC recently worked with SIGARCH to craft an agreement whereby our members will have access rights to past SC conference proceedings. SIGARCH members will continue to have access even after SIGHPC transitions to full sponsorship of the conference. The first SIGHPC Connect e-newsletter was finalized in June 2012 and has been uploaded into the DL.

Chapters

Although no chapters have been formalized yet, we have received requests from two domestic and two international groups to create chapters. We are currently working through the processes with ACM HQ and hope to have the first one (DC metro area) in place within the next few months.

Finances

Our first months were spent building a base fund. The initial officers have been aggressive in pursuing donations to cover startup costs, with the result that as of June 30, SIGHPC has already built a balance of just under \$20K, and for next FY is projected to be \$65-70K (assuming membership stays flat).

Summary

In its first 7 months, SIGHPC has developed an enthusiastic member community and a respectable financial base. The interest of its members can be gauged by its rapid growth in membership,

which shows no sign of abating. The primary challenges going forward are how to better serve our members and how to leverage SIGHPC to help steer the community, particularly in terms of workforce and professional development.

SIGIR FY'12 Annual Report
July 2011-June 2012
Submitted by: James Allan, Chair

Overview

The year just completed has again been a successful one for SIGIR. The SIG remains in a healthy position financially, with professional memberships at approximately 1060, and direct sponsorships of several well-attended annual conferences. The current EC has completed its second year successfully, supported by an active group of officers and volunteers. The research focus of SIGIR continues to be of key and increasing significance to the world at large.

Finances

The Executive Committee attempts to run a “break even” budget in which SIGIR neither gains nor loses much money. However, we are glad to report that SIGIR has a projected surplus of \$63K for the FY2011 year. This is largely a result of several successful conferences in 2010 and 2011, with a projected net of \$54K. Other income included \$107K from 346K downloads from the ACM Digital Library, and membership income around \$35K.

The SIG’s reserves remain greater than one times the annual conference expenditure. After the ACM conference overheads, the largest single budget expense for the SIG in 2011 was \$78K paid for student travel support to attend the SIGIR conference in Beijing, plus a further \$18K in externally sponsored travel awards for students living or studying in developing countries, Chinese students, and women pursuing their Ph.D. In 2012, SIGIR budgeted and has committed \$101K in student travel support, plus another \$10K available from sponsorships. The EC is comfortable with these expenses as the future of the SIG and our field as a whole is dependent on our future researchers, whom we now support as students.

The SIGIR Executive Committee has decided not to raise dues for the coming year.

Volunteers

In addition to the elected officers, SIGIR is served by a large community of volunteers, including some with named roles:

Asia Regional Representative to the EC:	Tetsuya Sakai
Forum Editors:	Raman Chandrasekar & Diane Kelly
SIG-IRList Editor:	Mark Smucker
Information Director:	Djoerd Hiemstra
Awards Chair:	Shlomo Geva
JCDL Liaison:	Edie Rasmussen
CIKM Liaison:	Charlie Clarke
WSDM Liaison:	Ricardo Baeza-Yates

SIGIR thanks them all for their work on behalf of the IR community during the last year.

Conferences

SIGIR sponsors, co-sponsors, and cooperates with other technical groups on several conferences and / or workshops during the year. The main conference is the annual SIGIR conference, which is located on a 3-year rotation in: (1) The Americas (2009 Boston, 2012 Portland OR, 2015 Santiago, Chile); (2) Europe, Africa, or the Middle East (2010 Geneva, 2013 Dublin, 2016...); and (3) Asia or Australia (2011 Beijing, 2014 Gold Cost Australia, 2017...).

SIGIR

The thirty-fourth Annual ACM SIGIR International Conference on Research and Development in Information Retrieval, SIGIR'11, will be held in Portland, Oregon, August 12-16.

Future conferences: SIGIR 2013 will be held in Dublin, Ireland, July 28-Aug 1; SIGIR 2014 will be held in Gold Coast, Australia; and SIGIR 2015 will be held in Santiago, Chile.

Preliminary expressions of interest will be presented at the 2012 conference for SIGIR 2016, which is a year for Europe or Africa to host SIGIR. Interested groups will be asked to prepare formal bid documentation to be reviewed by the Executive Committee, following the ACM protocol. The bid process is documented at <http://sigir.org/bid.html>.

Other Conferences

SIGIR also co-sponsors three other ACM conferences, CIKM, JCDL, and WSDM. Each of these upcoming conferences will be reported on at the SIGIR '12 Conference,

In Cooperation

In addition to the four conferences that SIGIR sponsors or co-sponsors, we “cooperate” with several other IR-related conferences but have no financial stake in them. These conferences complement the technical focus of our own conferences. As a cooperating society, SIGIR members obtain reduced registration fees and other member benefits at these conferences. Upcoming and recent “in cooperation” events include:

- European Conference on Information Retrieval: ECIR 2013 in Moscow, Russia; ECIR 2012 in Barcelona, Spain
- Information Interaction in Context Symposium: IliX 2012 in Nijmegen, The Netherlands
- User Modeling, Adaptation, and Personalization: UMAP 2012 in Montreal, Canada

During this past year, one conference interested in being “in cooperation” suffered from an odd process glitch regarding publication status in the ACM Digital Library. We are updating our on-line information (http://sigir.org/in_coop.html) to reduce the chances of that problem in the future.

Publications

The SIGIR Web site is maintained by SIGIR's Information Officer, Djoerd Hiemstra. It provides timely information about SIGIR-sponsored conferences, “in cooperation” conferences, and SIGIR activities, as well as Business Meeting slides, the annual report, and other information about how SIGIR operates and SIGIR's history. In addition to providing information about the organization, the SIGIR web site also hosts the SIGIR Forum and SIG-IRList sites.

The SIGIR Forum is co-edited by Diane Kelly and Raman Chandrasekar. The Forum is published three times a year. The Special issue is the SIGIR Proceedings; the December and June issues cover IR conferences, workshops and symposia, as well as in-depth essays based on the Salton Award Lecture and other keynote addresses, as well as short papers on current research trends. The Forum appears both online (<http://www.acm.org/sigir/forum/>) and in paper.

The SIG-IRList is a SIGIR-sponsored electronic newsletter (<http://www.acm.org/sigir/sigirlist/>), edited by Mark Smucker, of the University of Waterloo. The SIG-IRList provides a regular newsletter of IR information and nicely compliments the archival publication SIGIR Forum. The SIG-IRList contains job announcements, notices of publications, conferences, workshops, calls for participation, and project announcements. It is a much valued and appreciated service of SIGIR for its members.

Diane Kelly and Mark Smucker are stepping down from their positions. We thank them for their efforts in support of the community.

Membership and Membership Programs

SIGIR offers members the following benefits: SIGIR Forum (paper & online); reduced conference registration fees to sponsored and “in cooperation” conferences; access to the ACM Digital Library, in particular SIGIR, CIKM, JCDL, and WSDM conference proceedings; as well as optional Proceedings Packages, and the SIG-IRList electronic newsletter. The SIGIR Proceedings Package includes copies of the CIKM and JCDL conference proceedings.

SIGIR has recently made hard copy versions of the SIGIR conference proceedings available only by special request and at an additional cost. This change appears to have been successful with the community and appears likely to become a permanent change.

Awards given by SIGIR this fiscal year

In addition to Best Paper Award(s), SIGIR provides the triennial Gerard Salton Award (to be awarded next in August of 2012), and funds JCDL's Vannevar Bush Award jointly with SIGWEB. SIGIR continues working to put forth deserving nominees for the general ACM Awards. All SIGIR awards are documented on the SIGIR web site.

The Awards Chair position within SIGIR was unfilled for a few years. Shlomo Geva has recently accepted the position and we look forward to his help on awards.

Gerard Salton Award

This award is presented every three years to an individual who has made "... significant, sustained and continuing contributions to research in information retrieval". It was established as the SIGIR Award in 1983 and renamed in 1997 in honor of Professor Gerard Salton, who is considered by many to be the person most responsible for the establishment, survival, and recognition of the field of IR. The Salton Award Committee is comprised of the available prior winners of the Salton Award, in consultation with the SIGIR Chair.

Vannevar Bush Best Paper Award

Along with SIGWEB, SIGIR jointly funds the Vannevar Bush award honoring the best paper at the Joint Conference for Digital Libraries. This award was presented in June 2012 to Hongbo Deng, Jiawei Han, Michael R. Lyu, and Irwin King for their paper "Modeling and exploiting heterogeneous bibliographic networks for expertise ranking."

SIGIR Best Paper Awards

The SIGIR 2012 conference Best Paper awards will be presented in August 2012. A parallel Best Student Paper award is given if the Best Paper award is not given to a student paper.

Significant publications

The annual SIGIR conference (2012) continues to be the leading conference in the field of Information Retrieval. It received a total of 483 submissions and accepted 98, or 20.3%. This rate is the target acceptance rate for the conference.

An additional 76 posters (36.5% acceptance rate), 17 software demonstrations, 9 tutorials, and 4 workshops were presented. Keynote talks will be delivered by the 2012 Salton Award recipient (announced at the conference) and by Daniel R. Masys ("Retrieving Information from the Book of Humanity: the Personalized Medicine Data Tsunami crashes on the beach of Jeopardy") from the University of Washington.

Papers at the conference cover topics in Architectures, Classification, Community QA, Diversity, Efficiency, Entities, Evaluation, Exploratory Search, Federated Search, Learning to Rank, Multimedia, Personalization and User Modeling, Query Completion and Correction, Query Expansion and Reformulation, Query Suggestion, Recommender Systems, Representation, Search Log Analysis, Social Media, Spam and Abuse, Structured Data, User Intent.

The conference will be held August 12-16 in Portland, Oregon. As of this report, the conference has received external sponsorship from Baidu, Google, Microsoft Research, Yahoo! Labs, Ask.com, ebay Research Labs, IBM Research, Oracle, Cambridge University Press, Morgan & Claypool Publishers, Springer, Now Publishers, the University of Oregon, and Oregon Health & Science University.

Programs which provide service to some part of the SIGIR community

Because of heavy industrial activity in the Information Retrieval community, the SIGIR conference has run an "industry track" at the conference. The track started as a separate event in 2007 and was integrated into the main conference starting in 2009. The track has been very popular, highlighting key industrial issues and challenges as well as attracting industrial researchers to the main technical conference.

SIGIR has been collecting archive publications from the early days of the Information Retrieval field. Most of the information is unavailable anywhere on-line, so this archive provides new access to the historical information. A description of the gathered information is available at <http://sigir.org/museum/contents.html>. It continues to be updated with new (old) material on an on-going basis, as the information is found and can be scanned. SIGIR is exploring ways to make this information a more valuable resource for the community.

Key issues facing SIGIR in the next 2-3 years

The SIGIR EC polled the IR community (SIGIR members and others) in July and August of 2011. A summary of the responses appeared in the December 2011 issue of the SIGIR Forum (<http://sigir.org/forum/2011D-TOC.html>).

In response to that poll, the SIGIR EC has undertaken the following efforts, all of which are on-going challenges within the community:

- Because of concern about rising conference fees (particularly for students), the EC has been requiring its sponsored conferences to carefully examine expenses and reduce their budgets if necessary. The main thrust of the effort has been to target (lower) registration rates and force the conference to work with the lower rate.
- The SIGIR EC has drafted a plan to support student travel to conferences and workshops supported by or related to the SIGIR community. This plan will be presented to the SIGIR membership for its consideration at the August 2012 meeting.
- There is strong concern but a sharply divided opinion among members of the community regarding publications that are based upon proprietary data available to no or very few members of the community. SIGIR 2012 is including a panel to debate/discuss the multiples perspectives.

In addition to those efforts, the SIGIR EC is continuing an effort to locate procedural documents related to the SIG and to move them onto the SIGIR web site (<http://sigir.org>) so that they are easily available to the SIGIR EC and publicly available to all interested members of the community.

Summary

SIGIR had another productive and successful year, with important intellectual and social contributions. Our conferences have been successful in all senses (with strong technical content and good international participation), and our financial situation is quite healthy. Perhaps most importantly, we continue to have very strong participation in ACM SIGIR by the international IR community, especially in a willingness to serve as volunteers for conference and SIG-related activities.

SIGITE FY'12 Annual Report
July 2011 - June 2012
Submitted by: Mark Stockman, Chair

ACM SIGITE continued to serve its membership in 2011-2012. Major happenings included planning a new conference centered on research and the election of a new slate of officers for the SIG.

SIGITE 2011 Conference on IT Education

Thanks to the efforts of the Conference Chairs, Ed Sobiesk and Bryan Goda, as well as the Program Chair, Randy Connolly, the SIGITE 2011 Conference on IT Education was successful on all levels. Attendance and quality of papers submitted were at a level expected by the Executive Committee. The number of reviewers for the conference proceedings increased significantly showing the commitment to the organization by its membership. The number of submissions also grew by a large margin over conferences in recent years as well.

SIGITE Elections

A committee comprised of Mark Stockman, Richard Helps, and Barry Lunt compiled an election slate for new officers of SIGITE. It was great to see the real interest in membership to submit their names for the election. The candidates were comprised of veteran SIGITE members, all of whom would have served the organization well. The incoming Chair, Vice Chair, and Secretary/Treasurer of SIGITE are Rob Friedman, Mihaela Sabin, and Rick Homkes.

SIGITE 2012 Conference on IT Education and Research in IT Conference (RIIT)

SIGITE is looking forward to its first conference to be held outside the United States this year. Preparations have been smooth thanks to the Conference Chair, Randy Connolly. Ramping up the inaugural collocated Research in IT Conference has also proceeded well. The Program Chairs of the Education and Research conferences, William Armitage and Jeff Brewer, have worked together in blending the submission and review process of both. We were happy to get 20 submissions for the first RIIT conference, 10 were accepted for publication.

Future Conference Sites

The future SIGITE conference hosting institutions have been identified as University of Central Florida (2013), University of Washington-Tacoma (2014), and DePaul University (2015). SIGITE members from each of these institutions have come forward as volunteers to organize the conferences. Because of the shakeup of the university system in Florida this year, another institution has agreed to host the 2013 conference in the off chance that UCF cannot follow through on its commitment. SIGITE is awaiting official university administration commitment (promised this month) on its status as host.

Issues Going Forward

IT Model Curriculum - Informal discussions have begun on the new iteration of the IT model curriculum among the SIGITE membership. Parallel discussions are occurring within the Computing Accreditation Commission and ABET.

IT Research - Continues to be a focus for the organization. It is hoped the RIIT conference continues to grow and promote discussion of IT research.

SIGKDD FY'2012 Annual Report
July 2011-June 2012
Submitted by: Usama M. Fayyad, Chair

1. Annual Awards

The ACM SIGKDD presents two prestigious awards every year in two categories: Innovation and Service. The nomination process and the selection of award winners is conducted by a committee of experts typically chaired by the winner of the prior year's Service Award winner. The 2011 SIGKDD Awards Selection Committee consisted of:

2011 ACM SIGKDD Awards Committee

Osmar R. Zaiane – Chair (prior year winner of the SIGKDD Service Award 2010)

Ramasamy Uthurusamy - Past Chair

Christos Faloutsos (Carnegie Mellon University)

Peter Flash (University of Bristol)

Robert Grossman (University of Illinois at Chicago)

Ying Li (Microsoft)

Bing Liu (University of Illinois at Chicago)

Sunita Sarawagi (Indian Institute of Technology, Bombay)

Padhraic Smyth (University of California at Irvine)

Qiang Yang (Hong Kong UST)

ACM SIGKDD 2011 Innovation Award was awarded to Prof. J. Ross Quinlan of RuleQuest in Sydney, Australia - July, 2011. Citation: for his seminal contributions to rule induction and decision tree algorithms and for participating in laying the foundation of data mining, particularly with the invention of ID3 and C4.5, algorithms pivotal in myriad applications.

ACM SIGKDD 2011 Service Award was awarded to Dr. Bharat Rao (Siemens Research) - July, 2011. Citation: for his contributions to society and the data mining community in recognition for his pioneering applications of data mining to develop healthcare products that reduce costs and improve the quality of patient care.

1.2 SIGKDD Distinguished Dissertation Award

The 2011 SIGKDD **Doctoral Dissertation** award has attracted a high number of excellent applicants.

The winner was

Dr. Michael Hay for his dissertation titled *Enabling Accurate Analysis of Private Network Data*

(advisors: David Jensen, and Jerome Miklau, of University of Massachusetts at Amherst)

Dr. Hay's dissertation presents several discoveries and innovations in the area of privacy-preserving analysis of relational data. These findings are likely to have important implications for preserving personal privacy while analyzing data in social networks.

Runner-up:

Dr. Tianyi Wu >> *"A Framework for Promotion Analysis in Multi-Dimensional Space"* >>

(advisor: Jiawei Han, University of Illinois Urbana-Champaign).

Certificate of Recognition:

Dr. Gaurav Pandey "Data Mining Techniques for Enhancing Protein Function Prediction"

(advisor: Vipin Kumar, University of Minnesota).

Honorable Mention:

Dr. Wenjun Zhou "Correlation Analysis: From Computation Hardness to Practical Success"

(advisor: Hui Xiong, Rutgers University).

Dr. Loic Cerf "Constraint-Based Mining of Closed Patterns in Noisy N-Ary Relations"

(advisor: Jean-François Boulicaut), LyonTech Campus de la doua - INSA Lyon LIRIS

All annual awards were presented at KDD-2011 Conference in as part of the opening ceremony to the conference.

The 2012 Dissertation Awards will be announced in July 2012 and will be awarded at the SIGKDD-2012 conference in Beijing, China on August 21, 2012.

2. Significant Publications

The KDD 2011 annual conference maintained SIGKDD position as the leading conference on data mining and knowledge discovery, with a new all time record of 714 submissions of full papers in the academically oriented Research and Industry/Government Applications tracks. Of these, the program committee accepted 126 full papers representing an acceptance rate of 17.6% overall.

We also added a new form of track in the conference: The Industry Experience Expo – which attracted a very selective set of 12 presentations on actual deployed and significant applications or systems presented by industry leaders.

The breadth of topics covered in this year's research program is correspondingly diverse, including social networks, privacy, text mining, predictive modeling, time-series forecasting, spatial data analysis, and more. These areas were in addition to traditional data mining classification, clustering, research and applications papers.

The conference included 4 world-class keynote speakers this year, providing expert overviews of the latest advances in optimization, Webmining, causality, and bioinformatics. A panel discussion on data mining prize competitions including several of the world's leading authorities on this topic. Of note this year was the high level of attendance at the I/G Applications track with all sessions filled or over-subscribed. This has also been our experience with the new "Industry Practice Expo" track which consisted primarily of invited speakers and heavily edited presentations by the program committee – we believe some of the best applications in our field are deployed by teams who do not have the time or permissions to write full papers that are evaluated based on classical research criteria.

2.1 KDD-2011 Conference Dates and Attendance

KDD 2011 was held in San Diego, CA starting Sunday August 21st to Wed August 24th, 2011.

Saturday August 20th was provided as an extra day for extended workshops. Conference Workshops took place on August 20-22, and Tutorials on August 21st. The opening session with awards ceremony was held on August 21st evening as part of the plenary opening session of the formal conference.

2011 SIGKDD Best Research Paper Awards

The award recognizes papers presented at the annual SIGKDD conference that advance the fundamental understanding of the field of knowledge discovery in data and data mining. For more information please refer to the [SIGKDD Best Research Paper Award page](#). Awards were sponsored by HP.

Best Research Paper: innovative contribution

Leakage in Data Mining: Formulation, Detection, and Avoidance

Authors: Shachar Kaufman, Saharon Rosset, Claudia Perlich

Best Student Paper Awards: (Research)

KDD 2011 Best Student Paper had two awardees this year which were viewed as equally compelling of this honor:

1. "Collaborative Topic Models for Recommending Scientific Articles"
Authors: Chong Wang, David Blei
2. "Tell me what I need to know: succinctly summarizing data with itemsets"
Authors: Michael Mampaey, Nikolaj Tatti, Jilles Vreeken

2011 SIGKDD Application Paper Awards

KDD-2011 Conference continued to have strong participation of the industrial researchers, as evidenced by the record 101 papers submitted to the industrial track (only 20 accepted). This year we enhanced the criteria for acceptance and raised the bar on what we considered a real application that is deployed and used in the field. This resulted in diminished acceptances but a much higher quality of content.

This year's statistics on the Industry/Government application Track were as follows:

- Submissions: 73
- Acceptances: 26
- These papers were distributed as follows:
 - 9 Deployed
 - 3 Discovery
 - 14 Emerging

2010 SIGKDD Best Industry/Government Track Paper Award

The award recognizes papers presented at the annual SIGKDD conference that advance the fundamental understanding of the field of knowledge discovery in data and data mining. This year's Best Industry/Government Track Paper Award is sponsored by SAIC. For more information please refer to the [SIGKDD Best Industry/Government Track Paper page](#).

Best Industry/Government Track Paper

"Detecting Adversarial Advertisements in the Wild"

Authors: D. Sculley, Matthew Eric Otey, Michael Pohl, Bridget Spitznagel, John Hainsworth, Yunkai Zhou (Google, Inc.)

2.2 Conference attendance and Budget Management

The KDD-2011 conference continued a strong tradition of high attendance and continued healthy financial management and performance. **The conference attracted a total of 970 registrants with about 1050 attendees.** This is an all-time high, with the exception of KDD-2000 held just prior to the bursting of the Internet Bubble and represents over 10% growth in registrations of KDD-2010. We continue to thrive and draw interest even through years of crisis and low travel budgets.

Revenue Summary:

Final registrations: 970 Registrants

Revenue from Registrants: \$756K

Revenue from Sponsorship: \$80K (*this amount needs to be finalized more accurately*)

Revenue from Exhibitors: \$12,500 (5 exhibitors apart from Sponsors)

2.3 Workshops and Tutorials

In addition, KDD 2011 hosted 16 Workshops (as opposed to 14 in 2010) and 6 Tutorials (as opposed to 12 in 2010). Workshops were held Sat-Sun, August 20-21, 2011

- [KDD Cup Workshop 2011](#)
- [5th International Workshop on Knowledge Discovery from Sensor Data \(SensorKDD-2011\)](#)
- [Visual Analytics and Information Fusion](#)
- [The Fifth International Workshop on Social Network Mining and Analysis \(SNAKDD 2011\)](#)
- [Mining and Learning with Graphs](#)
- [Knowledge Discovery in Educational Data](#)
- [Knowledge Discovery, Modeling and Simulation](#)
- [Predictive Markup Language Modeling \(PMML\)](#)
- [Mining Data Semantics \(MDS2011\)](#)
- [10th International Workshop on Data Mining in Bioinformatics \(BIOKDD '11\)](#)
- [Data Mining Applications in Sustainability](#)
- [The Eleventh International Workshop on Multimedia Data Mining \(MDMKDD 2011\)](#)

- [KDD4Service: Data Mining for Service and Maintenance](#)
- [Data Mining for Medicine and Healthcare](#)
- [The Third Workshop on Large-scale Data Mining: Theory and Applications](#)
- [The Fifth International Workshop on Data Mining and Audience Intelligence for Online Advertising](#)

The tutorials were held during the day Sunday August 21st, 2011 and consisted of the following tutorials:

1. **Data Mining Problems in Internet Ad Systems**
(by Muthu Muthukrishnan, Rutgers University)
2. **Social Media Analytics**
(by Jure Leskovec, Stanford University)
3. **Modeling with Hadoop**
(by Vijay Narayanan, Yahoo! Inc; Milind Bhandarkar, LinkedIn Corp)
4. **Finding Bias, and Making Do With Data That Have It**
(by Diane Lambert, Google Inc.)
5. **Scaling Up Machine Learning: Parallel and Distributed Approaches**
(by Ron Bekkerman, LinkedIn; Mikhail Bilenko, Microsoft Research; John Langford, Yahoo! Research)
6. **Probabilistic Topic Models**
(by David Blei, Princeton University)

2.3 SIGKDD Video Releases: the KDD-2011 conference program videos

Per ACM instructions, we changed service providers of conference videos from VideoLectures.net (which handled previous KDD conferences) to another vendor. This process was not as successful and we experienced major delays in releasing the full video program of KDD-2011, all recorded material should be published in video format ACM Digital Library web site.

2.4 SIGKDD Explorations

We announced a new Editorial team for SIGKDD Explorations at KDD-2010. The Editor-in-Chief as of July 2010 is: Bart Goethals of University of Antwerp and the Associate Editors are: Charu Aggarwal of IBM TJ Watson Research Center and Srinivasan Parthasarathy of The Ohio State University. During 2011 we added Ankur M. Teredesai of University of Washington as additional Associate Editor.

SIGKDD Explorations published two issues in the last fiscal year:

- July 2011, Volume 13, Issue 1: Special focus on "Privacy in Mobility Data Mining" with guest editors: Aris Gkoulalas-Divanis, Yücel Saygin, Dino Pedreschi
- December 2011, Volume 13, Issue 2: Special focus on "Educational Data Mining" with guest editors: Toon Calders, Mykola Pechenizkiy

3. Significant programs that provided a springboard for further technical efforts

ACM Transactions on Knowledge Discovery and Data Mining (TKDD) launched in 2007, <http://tkdd.cs.uiuc.edu/>, with Jiawei Han as editor in Chief, has continued as one of the two major journals in our field. TKDD published 5 issues in 2010 and 1 issues in 2011 so far.

The original major journal in our field, *Data Mining and Knowledge Discovery*, currently with Geoff Webb as Editor-in-Chief continues to be a top-cited journal internationally. This journal was launched in 1996 with Usama Fayyad as founding Editor-in-Chief.

4. A very brief summary for key issues that the SIGKDD membership will have to deal with in the next 2-3 years.

Some of the key issues for SIGKDD and SIGKDD members:

- Maintaining effective SIGKDD operation after transfer to new SIGKDD leadership.

- Difficulty in getting industry participation in KDD conference which we are addressing with the new Industry Applications Experience track launched in KDD-2011
- Growing rift in the relevance of problems that academia can work on due to the difficulty of getting access to large real-world data, with some of the most important data and research problems locked inside Google, Yahoo, Microsoft, and other web “giants”. We are currently working on a solution to provide big compute platform for academic research
- Getting new membership and especially student members
- Negative perception of “data mining” in the US (and sometimes reality) that data mining is a technology which invades privacy (eg. Recent NH and VT laws prohibiting “prescription data mining”)
- Addressing issues of data privacy and the role of data mining positive or negative in that arena
- Competitive pressure from a new generation of APPLIED conferences that are drawing attention and causing some attention pressure. KDD-2010 is responding by creating an additional applied invited track on predictive analytics as well as new formats for fireside chat on important topic and special applied panels.
- Creating more forums for participation on-line as well as a professionally produced magazine for the field if the economics justify it.
- Creating a new generation, web 2.0 web presence for SIGKDD and KDD conferences. We started this effort in 2011 and hope to announce results at KDD-2011.

5. Financial Snapshot

SIGKDD continues to have a healthy financial balance sheet and surplus cash balance. The SIGKDD closed FY12 on July 31, 2012 with a cash balance of over one million Dollars (\$1,074,000). Our cash balance re-enforces our financial feasibility as a SIG. The actual accounting for KDD-2011 shows a small deficit of \$17K for the year, but we are still working with ACM to try to resolve this fact as we believe attendance numbers and sponsorships should have generated a significant surplus.

We plan to increase investment activities in the next fiscal year to institute some value added programs that increase the value of SIGKDD to members as well as enhance the field as a whole. We currently have contracted staff to handle PR and promotions and are considering hiring additional dedicated contractors to address issues that need more systematic attention, such as web site maintenance and marketing activities related to the field.

SIGMETRICS FY'12 Annual Report
July 2011 - June 2012
Submitted by: John C.S. Lui, Chair

ACM SIGMETRICS had a very strong and active year, in particular, we had a joint conference with IFIP WG 7.3, and the conference, ACM Sigmetrics/Performance'12, was held in London and we had a high number of attendance.

We had a strong technical program at the conference, and present number of awards:

Achievement Award

Dr. Debasis Mitra was selected as the recipient of the 2012 ACM SIGMETRICS Achievement Award in recognition of his fundamental contributions to the modeling, analysis and design of communication networks.

Debasis Mitra is Vice President in the Chief Scientist's Office of Bell Labs, Alcatel-Lucent. He is responsible for global research partnerships and academic relations. From 1999-2007, as Vice President of the Mathematical and Algorithmic Sciences Research Center, he directed activities in fundamental mathematics, algorithms, complex systems analysis and optimization, statistics, learning theory, information and communications sciences, and industrial mathematics.

He is a member of the National Academy of Engineering, a Bell Labs Fellow and a Life Fellow of the IEEE. He is a recipient of the 1998 IEEE Eric E. Sumner Award, the 1993 Steven O. Rice Prize Paper Award and the 1982 Guillemin-Cauer Prize Paper Award of the IEEE. He is also the recipient of awards from the 1995 ACM Sigmetrics/Performance Conference, the Institution of Electrical Engineers (UK) and the Bell System Technical Journal. He has been a member of the editorial boards of the IEEE/ACM Transactions on Networking, the IEEE Transactions of Communications, the IEEE Transactions on Circuits and Systems, Queueing Systems (QUESTA) and Operations Research. He holds over 20 patents.

Rising Star Award

The 2012 ACM SIGMETRICS Rising Star Researcher Award was presented to Dr. Marc Lelarge.

ACM SIGMETRICS is pleased to announce the selection of Dr. Marc Lelarge of INRIA as the recipient of the 2012 ACM SIGMETRICS Rising Star Researcher Award in recognition of his significant contributions towards developing performance analytic approaches for large random structures and their implications to economics of communication networks.

Dr. Lelarge is a researcher at INRIA in the TREC Research team which is part of the computer science department of Ecole Normale Supérieure, Paris (France). He received a PhD in Applied Mathematics from Ecole Polytechnique (Palaiseau, France) in 2005, graduated from Ecole Polytechnique (Palaiseau), and qualified as an engineer at Ecole Nationale Supérieure des Telecommunications (Paris). His research interests include discrete probability and combinatorial optimization, network algorithms, network economics and statistical inference.

Dr. Lelarge has served on the program committees of ACM SIGMETRICS, NetCoop, GameSec. He serves on the Editorial Board of Queueing Systems and has served as program co-chair for the Stochastic Processes in Communication Networks for Young Researchers (part of Isaac Newton Institute 2010 programme) and the EURANDOM Young European Queueing Theorists Symposium. He received the NetGCoop 2011 Best Paper Award with E. Coupechoux.

Test of Time Award

Our SIG presented its next "Test of Time" award at the ACM SIGMETRICS 2012 conference as well. This award honours SIGMETRICS work published 10-12 years ago that still has significant impact today.

There was a tie this year for the award. The co-winners were:

Tian Bu, N Duffield, FL Presti, and D. Towsley. "Network Tomography on General Topologies".
In Proceedings of ACM SIGMETRICS 2002.

This paper is a pioneering work in network tomography and it presented novel and formal approaches to perform tomography on networks under general setting, from which various performance, e.g., delay, packet lost,..etc, can be estimated.

This year, we have the following award for the conference:

Best Paper Award:

Temperature Management in Data Centers: Why Some (Might) Like It Hot
by Nosayba El-Sayed (University of Toronto, Canada), Ioan Stefanovici (University of Toronto, Canada), George Amvrosiadis (University of Toronto, Canada), Andy A. Hwang (University of Toronto, Canada) and Bianca Schroeder (University of Toronto, Canada)

Kenneth C. Sevcik Outstanding Student Paper Award:

Optimal Queue-Size Scaling in Switched Networks
by Devavrat Shah (Massachusetts Institute of Technology, US), Neil Walton (University of Amsterdam, The Netherlands) and Yuan Zhong (Massachusetts Institute of Technology, US)

Best Student Poster Award:

FSP with Dynamic Speed Scaling
by Maryam Elahi (University of Calgary, Canada), Carey Williamson (University of Calgary, Canada), Philipp Woelfel (University of Calgary, Canada)

Conference Activities

The annual ACM SIGMETRICS conference is the premier forum for performance evaluation research, which spans a wide range of application domains in computer and communication systems. This year, it is a joint conference with IFIP WG 7.3 and the joint conference ACM Sigmetrics/Performance was held in London.

The 2012 conference took place in London, from June 11-15, 2012. Peter Harrison (Imperial College, UK) was the General Chair, with Martin Arlitt (HP Lab and Univ. of Calgary) and Giuliano Casale (Imperial College) were the Program Co-chairs.

The registered attendance for our event this year was around 190, which is a very good number, especially when the conference is held in an expensive city in London. We received healthy sponsorship from various companies so that we could reduce the conference registration fee. All in all, we expect have to a surplus, which will be shared between ACM Sigmetrics and IFIP WG 7.3, and ACM Sigmetrics expects to have a small surplus of \$10K for this year's event.

The general feedback on the conference was very positive. The main conference was three days, from Tuesday to Thursday. We also had tutorials on Monday, and the tutorials are:

(a) Micro and macro views of discrete state Markov models and their application to efficient simulation with Phase-type distributions

Philipp Reinecke (Freie Universitat Berlin), Miklos Telek (Technical University of Budapest) and Katinka Wolter (Freie Universitat Berlin and Newcastle University, UK)

(b) PoTrA: A framework for Building Power Models For Next Generation Multicore Architectures

Ramon Bertran (Barcelona Supercomputing Center (BSC), Spain) and Marc Gonzalez (Universitat Politecnica de Catalunya (UPC))

(c) Basic Theory and some Applications of Martingales

Richard A. Hayden (Imperial College London)

(d) Applications of Machine Learning to Performance Evaluation

by Edmundo de Souza e Silva (Federal University of Rio de Janeiro) and Daniel Sadoc Menasche (Federal University of Rio de Janeiro)

(e) Introduction to Network Experiments using the GENI CyberInfrastructure

Jay Aikat (University of North Carolina at Chapel Hill) and Kevin Jeffay (University of North Carolina at Chapel Hill)

On Monday/Friday, we had several workshops, they are:

- *Greenmetrics Workshop 2012*

- *W-PIN: The First Workshop on Pricing and Incentives in Networks*

- *MAMA*

- *Privacy and Anonymity for Digital Economy*

Overall, the attendance to the tutorials and workshops was acceptable, however, more effort is needed to improve the attendance for future tutorials/workshops.

The technical program was very strong, as usual. There was a two-phase review process, with all papers getting at least three 3 reviews. The final TPC meeting was held at Columbia University in late January 2012. Ultimately, there were 31 papers accepted and the acceptance rate was around 16%. The program had a good mix of theory, systems, and networking topic areas.

The SIGMETRICS 2013 conference will take place at Pittsburgh, USA. The initial plan is to host it in CMU. The General Chair will be Mor Harchol-Balter (CMU) and the TPC Co-chairs will be John Douceur (Microsoft Research) and Jim Xu (Georgia Tech).

The dates, location, and organizers for SIGMETRICS 2014 and 2015 are yet to be determined, by the new SIG Executive.

New Initiatives

An ongoing initiative for our SIG is a proposed new journal, tentatively called ACM Transactions on Performance Evaluation (ToPE). We are currently updating our proposal based on feedback received from the ACM Publications Board, and have constituted a tentative editorial board and two Co-EiCs (Editor in Chief) for the journal.

Currently Prof. Don Towsley is updating all the questions raised by ACM but this is one major item we plan to finish this coming year.

Issues and Challenges

An ongoing challenge for our SIG is the slowly declining membership, which has been a trend for many SIGs since the introduction of the ACM Digital Library. We hope that the new journal, our awards program, and our increased visibility from co-sponsored and "in cooperation" events will help to promote the value of SIGMETRICS membership, and allow us to grow our membership base in the years ahead.

We are also exploring how to increase membership in regions outside USA/Europe, for example, one can consider the growing interest of performance evaluation in Asia (e.g, China, Taiwan, India, Singapore,...etc) as well as Australia.

Other issues that the officers are discussing:

- How to enhance visibility of Sigmetrics?
- How to create long term plan for future conferences?
- Discuss and strategize important research areas which are of interest to our community, and proactively organize workshops so as to enhance the research ?
- How can we help our members to achieve senior membership in ACM?

SIGMICRO FY'12 ANNUAL REPORT
July 2011- June 2012
Submitted by: Pradip Bose, Chair

The following are highlights of SIGMICRO's activities during fiscal year 2012.

SIGMICRO has worked to ensure the success of our flagship MICRO conference. MICRO celebrated its 44th anniversary last year in Porto Alegre, Brazil. The conference offered an excellent technical program, and outing. Attendance was slightly down because of the non-US location and the state of the worldwide economy. SIGMICRO has also helped start and support several other major conferences since 2001: CASES, CGO, and Computing Frontiers. All are doing well as reported below. As also reported below, we have a strong program to encourage attendance at our conferences by students and those facing financial hardship, with numerous travel grants provided to help defray cost of attendance, in addition to heavily discounted student registration rates.

As reported last year, our ambitious history project has completed its first phase under the leadership of Yan Solihin, who with the help of historian Paul Edwards of the University of Michigan compiled excellent interviews with Bob Colwell and Edward Davidson. These interviews – both transcripts and oral recordings – are available on the SIGMICRO Newsletter site: <http://newsletter.sigmicro.org/sigmicro-oral-history-transcripts>. Yan had to step down from this important position due to other work priorities, so the newly elected executive committee has begun a search for a worthy and qualified replacement to carry on the fine work that Yan had started. This has not been an easy task! We have not been able to fill the position as of June 30, 2012. Yan's outstanding contributions were recognized through a special plaque that was sent to him via surface mail (since he was unable to attend MICRO-44 in Brazil). In addition, SIGMICRO awarded plaques to the three 2012 inductees to the Micro Hall of Fame (<http://newsletter.sigmicro.org/micro-hof.txt/view>), Babak Falsafi, Gabriel H. Loh and Li-Shuan Peh.

SIGMICRO CONFERENCE Activities

MICRO-44: December 4 – 7, 2011

<http://www.microarch.org/micro44>

SIGMICRO's flagship conference was reasonably successful with a turnout of slightly under 300 people. Attendance was down ostensibly due to the following factors: (a) non-US location; (b) depressed world-wide economy; (c) visa-related difficulties for some; (d) poor administration of the allocated student travel grants. The conference had 209 submissions. Submissions came from more than 15 countries with China and Spain following the US in number of submissions. Of the 209 submissions, 45 were accepted, a relatively large absolute count for Micro, but still a very competitive 21% accept rate. There were also 8 workshops and 3 tutorials. The MICRO-44 allocated \$12,000 for student travel grants, of which \$6000 was committed by ACM SIGMICRO. Unfortunately, the conference organizers, were unable to organize the student travel funds administration in a timely manner. This was (evidently), partly due to the difficulties faced by the General Chair in coping with international money transfer logistics guided by Brazilian laws. However, steps were taken to reimburse student travel grant claims *after* the conference was over.

Micro enjoyed excellent technical talks, keynotes, workshops, and tutorials. The local organization and facilities were somewhat deficient, in comparison to recent prior Micro conferences. SIGMICRO polled attendees using surveymonkey.com as in prior years. The satisfaction levels were markedly down because of the factors alluded to above. The SIGMICRO executive committee had meeting in January 2013 to discuss the results of the survey, and decided to take proactive measures to make

sure that MICRO-45 organization would not suffer from similar deficiencies. In particular, the plan is to directly coordinate with the General Chair no later than early September, to make sure that the student travel grants allocated by SIGMICRO are properly distributed to deserving student attendees.

Location: Porto Alegre, Brazil

Outing: Boat ride on [Guaiba Lake](#) (followed by conference banquet).

General Chair: Luigi Carro, UFRGS

Program Co-Chairs: Andreas Moshovos, University of Toronto and Milos Prvulovic, Georgia Tech.

Keynotes: Doug Burger, Director of the Client and Cloud Applications research group in Microsoft Research; Steve Keckler, Director of Architecture Research at NVIDIA; Avinash Sodani, Chief Architect of MIC CPU, Intel.

4 Tutorials (compared to 3 in 2010):

- *Understanding and Exploiting Transmission-Lines in Computer Architecture*, Organizers/Presenters: Milos Prvulovic (Georgia Institute of Technology), Michael Huang (University of Rochester), Alenka Zajic (Georgia Institute of Technology).
- *Emerging architectures for DRAM + PCM main memory systems*, Organizers/Presenters: Bruce Childers (Univ. of Pittsburgh), Alexandre Peixoto Ferreira (IBM Research, Austin), Daniel Mosse (Univ. of Pittsburgh).
- *Hardware-Software Co-Designed Virtual Machines*, Organizers: Erik Altman (IBM Research), Shiliang Hu (Intel Labs), David Keppel (Intel), James E. Smith (Univ. of Wisconsin), Youfeng Wu (Intel Labs).
- *ILDJIT: a Compilation Framework for Static and Dynamic Program Analysis and Optimization*, Organizers: Simone Campanoni (Harvard), Aaron Smith (Microsoft Research), Timothy M. Jones (Univ. of Cambridge), David Brooks (Harvard).

5 Workshops (compared to 8 in 2010):

- **NoCArc:** Workshop on Network on Chip Architectures
- **ECSW:** Workshop on Energy Efficient Computing for a Sustainable World
- **HPPC:** Workshop on Hardware Support for Parallel Correctness
- **WRA:** Workshop on Resilient Architectures
- **WES:** Workshop on Embedded Systems

Best Student Paper Award:

Active Management of Timing Guardband to Save Energy in POWER7

Charles Lefurgy, Alan Drake, Michael Floyd, Malcolm Allen-Ware, Bishop Brock, Jose Tierno, and John Carter (*IBM*) – selected from an initial set of six papers shortlisted for presentation across two “Best Paper Candidates” sessions at the conference.

Student travel: \$8000 allocated for donation by SIGMICRO.

CGO 2010: March 31 – April 4, 2012

<http://www.cgo.org/cgo2012>

Also Co-Sponsored by ACM SIGPLAN.

CGO [Code Generation and Optimization] was held in San Jose, CA. Submissions: 90 papers; of which 26 were accepted (29%). CGO 2012 featured two keynotes (one of which was actually designated as an "invited" technical talk), a welcome reception / student poster session, and numerous workshops and tutorials. There were a total of 9 tutorials and workshops (compared to 15 in 2011).

Location: San Jose, CA.

General/Finance Co-Chairs: Carol Eidt, Microsoft and Anne Holler, VMware

Program Chairs: Uma Srinivasan (Intel)

Saman Amarasinghe, MIT

Keynotes: Chris Lattner (Open Source LLVM)

David Blythe (Intel)

8 Tutorials:

- [Pin!] Detailed Pin!
- [HYACC] LR(1) Parser Generator HYACC
- [WCC] WCET-Aware C Compiler
- [DynRIO] Building Dynamic Instrumentation Tools with DynamoRIO
- [SnucL] An OpenCL Framework for Heterogeneous CPU/GPU Clusters
- [ILDJIT] Hands-On ILDJIT for Static and Dynamic Program Analysis and Transformation
- [Delite] High Performance Domain Specific Languages Using Delite
- [MCPG] Multi-core Processors and GPUs

1 Workshop:

- WISH-4: Workshop on Infrastructures for Software/Hardware co-design

Best Paper Award:

"Compiling for Niceness: Mitigating Contention for QoS in Warehouse Scale Computers," Jason Mars and Mary-Lou Soffa, Univ. of Virginia.

CASES 2011: October 9-14, 2011

<http://esweek.acm.org/esweek2011/cases/>

Also in cooperation with ACM SIGBED

CASES [Compilers, Architecture, and Synthesis for Embedded Systems] joined two other embedded systems conferences in 2006 to create a larger "ESWeek" grouping and promote cross-fertilization of efforts in the embedded area. The combination of conferences was a success, and ESWeek has been repeated ever since, with the 2011 version in Taipei, Taiwan. In all, 61 submissions were received, of which 23 were accepted (for an acceptance rate of ~38%).

Location: Taipei, Taiwan

One of 3 Conferences in Embedded Systems Week: <http://www.esweek.org>

- **CASES**
- CODES+ISSS (Co-sponsored by ACM SIGDA and SIGBED)
- EMSOFT (Sponsored by ACM SIGBED)

Program Chairs: Rajesh Gupta (UCSD) and Vincent Mooney (Georgia Tech)

Keynotes:

Arvind, CSAIL, Massachusetts Institute of Technology, USA.
Ted Chang, VP and CTO, Quanta Computer, Inc, Taiwan.

Best Paper Award:

Architecting Processors to Exploit Timing Error Resilience – John Sartori and Rakesh Kumar (*Univ. of Illinois at Urbana-Champaign*).

Computing Frontiers 2012: May 15 - 17, 2012

<http://www.computingfrontiers.org/2012>

Computing Frontiers was held this year in Cagliari, Italy. It continued to attract high quality papers on futuristic ideas on the frontier of computing, with a program consisting of 25 full papers and 11 posters. Reflecting the high quality of Computing Frontiers, selected papers have been invited for an extended special issue of the Springer International Journal of Parallel Programming.

Location:

Cagliari, Italy

General Chair:

John Feo, Pacific Northwest National Lab, USA

Program Co-Chairs:

Paolo Faraboschi, HP Labs

Oreste Villa, Pacific Northwest National Lab, US

Keynote:

Moray McLaren (HP Labs)

Best Paper Award:

Avinash Lingamneni, Kirthi Krishna Muntimadugu, Christian Enz, Richard M Karp, Krishna Palem and Christian Piguat, "[Algorithmic Methodologies for Ultra-efficient Inexact Architectures for Sustaining Technology Scaling](#)".

FUTURE PLANS

We are working to improve the value of SIGMICRO to its members:

- Begun in 2008, SIGMICRO has been expanding the Micro Hall of Fame: <http://newsletter.sigmicro.org/micro-hof.txt/view>. The Micro Hall recognizes those authors with 8 or more papers since the conference inception in 1967. For the first time in 2010, SIGMICRO presented plaques at the conference to recipients; this was repeated in 2011. The Hall of Fame currently has 36 members, with three new members inducted in 2011: Babak Falsafi, Li-Shuan Peh and Gabriel Loh.
- In 2010, under the auspices of the larger ACM oral history project, the prior term SIGMICRO chair Erik Altman oversaw the completion of the first round of the SIGMICRO Oral History Project. Yan Solihin of North Carolina State led the effort, working with historian Paul Edwards of the University of Michigan. Prof Edwards compiled excellent interviews with Bob Colwell and Edward Davidson. These interviews – both transcripts and oral recordings – are available on the SIGMICRO Newsletter site:

<http://newsletter.sigmicro.org/sigmicro-oral-history-transcripts>. They contain a vast array of information from the personal (Bob Colwell growing up as one of six children of a milkman and Ed Davidson's fighting uncle to Intel's concern in the 1990s about the imminent demise of the x86 architecture in the face of the RISC onslaught and Ed Davidson's thoughts about advising graduate students.) Soon we hope to make the transcripts available in the ACM Digital Library as well, but wanted SIGMICRO to showcase them first. Due to the unavailability of Yan Solihin, the SIGMICRO executive committee is now searching for a qualified and eager replacement. The goal is to continue this fine effort by adding on to the successful compilation already in place.

- As the Hall of Fame and Oral History project sites may suggest, the SIGMICRO Newsletter continues under the editorship of Russ Joseph, who is a member of the newly elected SIGMICRO Executive Committee.
- We have considered other ways to add value, some of which have been suggested by the prior term executive committee:
 - Increasing the allocation of surplus funds to provide for more student travel grants in SIGMICRO-sponsored conferences.
 - Providing funded sponsorship of worthy forums that promote the participation of women and minorities in research areas of relevance to SIGMICRO. **For example, SIGMICRO has approved to be a sponsor of the CRA-W workshop, to be held in August 2012.**
 - Providing simplified mechanism for ACM and SIGMICRO membership when registering for our flagship MICRO Conference.
 - Encouraging qualified members of SIGMICRO to become Senior and Distinguished ACM Members.
 - Providing a discount on SIGMICRO membership for members of other SIGs. Joint membership helps encourage cross-pollination of ideas and areas, which often leads to productive results.
 - Minimizing conflicts between conferences dates.
 - Encouraging and developing SIGMICRO members to become ACM Distinguished Lecturers.
 - Reviving the effort to publish a few top SIGMICRO papers in CACM or proposing a new mechanism for highlighting the topmost SIGMICRO-relevant conference papers through a special issue in a reputed journal or magazine.

LEADERSHIP

The leadership of SIGMICRO reflects the new executive committee that took over from the prior one chaired by Erik Altman.

Chair:

Pradip Bose (*IBM*)

Vice-Chair:

David Brooks (*Harvard*)

Secretary-Treasurer:

Vijayalakshmi Srinivasan (*IBM*)

Members-at-Large:

Michael Gschwind (*IBM*) – *Industry Issues Editor*

Russ Joseph (*Northwestern University*) – *Newsletter Editor*

Milos Prvulovic (*Georgia Tech*) – *Chief Technical Strategist*

Erik Altman (*IBM*) – *Past Chair and SGB Liaison*

Jason Mars (*U of Virginia*) – *Website Editor*

SIGMIS FY'12 Annual Report
July 2011 - June 2012
Submitted by: Janice C. Sipior, Chair

Mission and Overview

SIGMIS is the Special Interest Group on Management Information Systems of the ACM. Members of SIGMIS are interested in information systems and technologies for management and the management of these systems and technologies. SIGMIS was founded in 1961 as the Special Interest Group on Business Data Processing and later was known as the Special Interest Group on Business Information Technology. SIGMIS publishes *The Data Base for Advances in Information Systems (Data Base, for short)* and holds the annual SIGMIS CPR conference dedicated to computer personnel research. SIGMIS also participates in the annual International Conference on Information Systems (ICIS) and the annual International Federation for Information Processing (IFIP) TC8 committee, as well as other conferences. SIGMIS promotes student achievement and partners with other organizations to provide services to members and to the profession.

Summary of Recent Accomplishments

During FY'12, some of the major events and accomplishments of SIGMIS include:

- Held the SIGMIS CPR Conference May 31-June 2, 2012 in Milwaukee, WI USA
 - Awarded the "Magid Igbaria Outstanding Conference Paper of the Year Award"
 - Held the SIGMIS Computer Personnel Doctoral Consortium
 - Provided travel grants to Doctoral Consortium participants
- At the International Conference on Information Systems (ICIS2011) December 4-7, 2011 in Shanghai, China
 - Sponsored the Doctoral Dissertation Paper Award
- Continued to represent ACM as a member of a select group to develop model curriculum for education in IS, both at the undergraduate and graduate level
- Continued to fund a representative to the International Federation for Information Processing (IFIP)

1. Awards

Beginning with ICIS 1995, SIGMIS became the sponsor of the ICIS MIS Doctoral Dissertation Award. In 2011, the award was given for Ryad Titah's dissertation entitled, "The Alignment of Business and IT strategy in Multi-Business Organizations," completed at HEC Montreal. His advisor was Henri Barki. First Runner-up: Sean Hansen's "A Socio-technical Perspective on Requirements Engineering," supervised by Kalle Lyytinen at Case Western Reserve University. Second Runner-up: Quianqian Liu's "How Do We Use Online Customer Review? A Cognitive Psychological Perspective," supervised by Elena Karahanna at University of Georgia.

The recipients of the "Magid Igbaria Outstanding Conference Paper of the Year Award" at the 2012 SIGMIS CPR Conference are Gaëtan Mourmant, Université de Strasbourg, and Katerina Voutsina, National Technical University of Athens, for their paper "What Should I Understand?: The Concept of Shift of Understanding, a Quote-Based Analysis."

2. Papers

SIGMIS held the SIGMIS CPR Conference May 31-June 2, 2012 in Milwaukee, WI USA. The conference program is available from the SIGMIS CPR conference website at:

<http://www.sigmis.org/SIGCPR2012/confprogram.html> or directly at:

[http://www.sigmis.org/SIGCPR2012/ACM SIGMIS CPR2012_FinalProgramMay16.pdf](http://www.sigmis.org/SIGCPR2012/ACM%20SIGMIS%20CPR2012_FinalProgramMay16.pdf).

Additionally, SIGMIS publishes *The Data Base for Advances in Information Systems (Data Base*, for short), a quarterly peer-reviewed publication devoted to communicating advances in research and best practice in MIS. Beginning in January 2012, the editorship transitioned to Co-Editors-in-Chief Andrew Schwarz, Louisiana State University, and David Salisbury, University of Dayton. Colleen Schwarz of Louisiana State University is the Managing Editor. For information about *Data Base*, please visit the SIGMIS website at: <http://www.sigmis.org/DataBase.html>.

3. Programs

Since 2006, SIGMIS held the Computer Personnel Doctoral Consortium. This year's CPR Doctoral Consortium was held on Thursday, May 31, 2012 at the SIGMIS CPR Conference May 31-June 2, 2012 in Milwaukee, WI USA. Beginning with the CPR 2011 conference, SIGMIS is providing travel grants to Doctoral Consortium participants.

4. Service to MIS Community

In conjunction with representatives of the Association for Information Systems (AIS), SIGMIS has been involved in the development of model curriculum for education in information systems both at the undergraduate and graduate levels. The latest version of the curriculum, IS 2010 Curriculum Guidelines for Undergraduate Degree Programs in Information Systems, has been finalized. IS 2010 is available as a Communications of the Association for Information Systems (CAIS) article at <http://aisel.aisnet.org/cais/vol26/iss1/18>. The ACM news release is available at: <http://www.acm.org/press-room/news-releases/2010/is-2010-curriculum-report/view>.

Additionally, the ACM and the IEEE Computing Society are founders of the International Federation for Information Processing (IFIP). IFIP acts on behalf of member societies in carrying out international cooperation to advance the information processing profession. SIGMIS continues to fund the attendance of the ACM's representative for one of the annual meetings of IFIP to promote involvement among the membership of SIGMIS and IFIP.

5. Key Issues

Plans for forthcoming annual CPR Conferences are underway. We discussed potential hosts at the SIGMIS Business Meeting at CPR 2012. The 2013 conference will be held in Cincinnati, Ohio USA, May 30-June 1, 2013. The Conference Co-Chairs are Thomas Ferratt, University of Dayton, and Eileen Trauth, The Pennsylvania State University. We are now in the process of securing hosts for subsequent CPR conferences, including Germany and Buffalo/Niagara Falls, New York. To increase conference participation, we have broadened the scope of CPR from "Computer Personnel Research" to "Computing & People Research."

SIGMM FY'12 Annual Report
June 2011 – June 2012
Submitted by: Klara Nahrstedt, Chair

1. Awards

Over the last year 2011-2012, we have given out one SIGMM-wide award, the SIGMM Technical Achievement Award 2011.

SIGMM Technical Achievement Award 2011: At the ACM Multimedia 2011, held in Scottsdale, Arizona, we have presented our 4th SIGMM Award for Outstanding Technical Contributions to Multimedia Computing, Communications and Applications (shortly Technical Achievement Award) to Professor Shih-Fu Chang from Columbia University for his technical achievements in the area of multimedia processing, retrieval and applications. The awardee for the SIGMM Technical Achievement Award 2011 was selected by the SIGMM Awards Committee Prof. Rainer Lienhart (SIGMM officer and chair of the committee) from University of Augsburg, Germany, Dr. Larry Rowe from FXPal and Prof. Tat-Seng Chua from National University of Singapore. .

Prof. Shih-Fu Chang gave a technical presentation "Content-Based Multimedia Retrieval: Lessons Learned from Two Decades of Research" in the plenary session on Tuesday Morning November 29, 2011 and his presentation can be found at <http://dl.acm.org/citation.cfm?id=2072300>

Besides the SIGMM-wide award, our flagship journal, ACM Transactions on Multimedia Computing, Communications and Applications (TOMCCAP) acknowledges the work of the associate editors and gives out the **best TOMCCAP associate editor** award to an editor who provides most excellent services to authors and the community. In 2011, Dr. Gerals Friedland from ICSI (International Computer Science Institute) at Berkeley was named the best associate editor of ACM TOMCCAP. The TOMCCAP Editor-in-Chief Prof. Ralf Steinmetz from Technical University of Darmstadt, Germany, presented the award at the banquet of the ACM Multimedia 2011 conference in Scottsdale, Arizona, USA.

In 2011, the editor-in-chief (EiC) of TOMCCAP, Ralf Steinmetz, and the ACM SIGMM chair, Klara Nahrstedt, successfully established the **ACM TOMCCAP Nicolas Georganas named award** for Best Paper, published in the TOMCCAP journal, to honor the memory and outstanding work of Prof. Nicolas Georganas, the founder and first EiC of TOMCCAP, who passed away in July 2010. The first winner of the Nicolas Georganas TOMCCAP Best Paper Award will be announced at the ACM Multimedia 2012 conference in Nara, Japan.

At our SIGMM-sponsored conferences, we have given out numerous conference-specific awards to celebrate the outstanding research as follows:

1.1. ACM International Conference on Multimedia (ACM Multimedia)

The ACM International Conference on Multimedia is the SIGMM flagship conference, and the ACM Multimedia 2011 was held in Scottsdale, Arizona, USA, November 28-December 1, 2011.

- a. **Best Paper Award 2011:** This award went to F. Yu, R. Ji, S. Chang, "Active Query Sensing for Mobile Location Search", team from Columbia University.
- b. **Best Student Paper Award 2011:** There were two awards given in this category.
 - a. The first best student paper award was given to W. Wu, A. Arefin, G. Kurrilo, P. Agarwal, K. Nahrstedt, R. Bajcsy, "Color-plus-Depth Level-of-Details in 3D Teleimmersive Video – A Psychophysical Approach", team from University of Illinois at Urbana-Champaign, and UC Berkeley.
 - b. The second best student paper was given to R. Garg, A. Varma, M. Wu, "Seeing ENF: Natural Time Stamp for Digital Video Via Optical Sensing and Signal Processing", team from University of Maryland, College Park.

Both Best Paper Award and Best Student Paper Awards were presented by Professors Wu-chi Feng, Nicu Sebe, Hari Sundaram.

- c. **Best Technical Demo Award 2011:** D. Monaghan, J. O'Sullivan, N. O'Conner, "Low-cost Creation of a 3D Interactive Museum Exhibition", team from Dublin City University.

- d. **Best Open Source Software Competition Awards 2011:** There was one award given to J. Hare, S. Samangoeei, D. Dupplaw, "OpenIMAJ and Image Terrier: Java Libraries and Tools for Scalable Multimedia Analysis and Indexing of Images". In addition to the award, there was 'Honorable Mention' of two important Open Source Software systems:
 - a. **ClassX:** An Open Source Interactive Lecture Streaming System
 - b. **Opencast Matterhorn 1.1:** Reaching New Heights

The awards were presented by Professors Pablo Cesar and Wei Tsang Ooi

- e. **Best Doctoral Symposium Paper 2011:** This award went to Ivan Anselmo, Sipiran Mendoza, "Local Features for Partial Shape Matching and Retrieval", and the award was presented by Dr. Yu-Ru Lin and Dr. Vincent Oria to the winners.
- f. **Multimedia Grand Challenge 2011:** We had a very interesting and inspiring competition for the multimedia grand challenge each year at ACM Multimedia conference. The grand challenges are provided by companies such as Google, Yahoo!, Microsoft, and others. The company representatives then participate in winner selection and award presentation. The winners of this year grand challenge were
 - a. **1st Prize:** "Photo Search by Face Positions and Facial Attributes on Touch Devices" by Yu-Heng Lei et al. from National Taiwan University, Taiwan.
 - b. **2nd Prize:** "Towards Textually Describing Complex Video Contents with Audio-Visual Concept Classifiers" by Chun Chet Tan et al from City University of Hong-Kong, Hong-Kong School of Computer Science, and Fudan University, China.
 - c. **Special Prize for the Best Application of a Theoretical Framework:** "Understanding Images with Natural Sentences", by Yohitaka Ushiku et al from University of Tokyo, Japan.
 - d. **Special Prize for the Best Integration of Multimedia Media:** "News Browsing System: Multimodal Analysis" by Bruno do Nascimento Teixeira et al from Federal University of Mines Gerais, Brazil.
- g. **Social Media Award:** For the first time, we have given an award to the person who made the most interesting comments and who initiated the most interesting discussions on the Social Media Channels. The award went to Dr. Sina Samangoeei from University of Southampton, United Kingdom.
- h. We have also acknowledged students who received NSF travel grants, we have recognized the "Web Development Teams", "Hive Development Team", the "Volunteer Core Team" with certificates.

1.2. ACM International Conference on Multimedia Retrieval (ICMR)

The ICMR 2011 conference is a SIGMM-sponsored conference. This was the 2nd conference after the merger of ACM CIVR (Conference on Image and Video Retrieval) conference and ACM MIR (Multimedia Information Retrieval) workshop, both SIGMM-sponsored events, The ICMR 2012 was held in Hong-Kong, June 5-8, 2012. This conference gives out the following awards:

- **Best Paper Award** after the competition of four papers in the Best Paper Session: The award went to "Linking Visual Concept Detection with Viewer Demographics" by A. Ulges, M. Koch, D. Borth, from German Research Center for Artificial Intelligence, Saarbrücken, Germany.
- **Best Demo Award:** This award went to "Cluster-based Photo Browsing and Tagging on the Go" by S. Papadopoulos, J. Bakalli, Y. Kompatsiaris, E. Schoinas, from Informatics and Telematics Institute, CERTH-ITI, Thessaloniki, Greece. .
- **Best Reviewer Award:** The ICMR 2012 introduced for the first time the Best Reviewer Award which went to John Kender from Columbia University.

2. Significant papers

There were several papers on new areas published in SIGMM-sponsored proceedings:

2.1. **ACM Multimedia 2011:** (<http://www.acmmm11.org/>)

This conference has been fully reorganized based on the SIGMM conference committee recommendation, where the effort was led by the SIGMM officer and Director of Conferences, Prof. Mohan Kankanhalli, and the committee chair Prof. Tat-Tseng Chua. The major change has been the explicit introduction of areas that have introduced new directions to the multimedia community, including mobile devices and social and educational aspect of multimedia. The conference was structurally divided into ten areas: (1) multi-modal integration and understanding in the imperfect world, (2) media analysis and search, (3) scalability in media processing analysis and applications, (4) multimedia systems and middleware, (5) media transport and sharing, (6) multimedia security, (7) media authoring and production, (8) location-based and mobile multimedia, (9) human, social and educational aspects of multimedia, (10) arts and contemporary digital culture. Out of these ten areas, four areas are very new in the ACM Multimedia community:

- **Multi-modal integration and understanding in the imperfect world:** In this area, a significant paper was "Audio-visual grouplet: temporal audio-visual interactions for general video concept classification", by Wei Jiang and Alexander C. Loui from Eastman Kodak Company, Rochester, NY, USA.
- **Scalability in media processing analysis and applications:** In this new area, a significant paper was "Multiple feature hashing for real-time large scale near-duplicate video retrieval", by Jingkuan Song et al, team from the University of Queensland, Brisbane Australia, Carnegie Mellon University, Pittsburgh, USA, and Hefei University of Technology, Hefei, China.
- **Location-based and mobile multimedia:** In this area, the paper "A mobile location search system with active query sensing" by Felix X. Yu et al, team from Columbia University, New York, USA made a very strong impression.
- **Human, social and educational aspects of multimedia:** The paper "Visual memes in social media: tracking real-world news in YouTube videos" by Lexing Xie et al., the team from Australian National University, Canberra, Australia, IBM Research, Hawthorne, USA, and Columbia University.

2.2. **ACM NOSSDAV 2011** (<http://nss.cs.ubc.ca/nossdav2011/>)

This workshop/working conference is under SIGMM sponsorship and it was held June 1-3, 2011, Vancouver, British Columbia, Canada. Significant papers continued to come out in the areas of mobile media delivery and wireless multimedia systems, H.264/SVC video streaming over wired and wireless networks, impact of network coding on WiFi media delivery, social media in large scale VOD systems, content clouds and social media. The discussion about DASH and improving HTTP performance for video streaming, as well as about GPU and multi-core for multimedia continued. Much more care was given to system and networking solutions that addressed energy and delay in multimedia systems.

2.3. **ACM Multimedia Systems 2012** (<http://www.mmsys.org/?q=node/49>)

The SIGMM-sponsored 3rd ACM MMSys conference was held in Chapel Hill, North Carolina, February 22-24, 2012. The organizers combined the MMSys with the MoVid workshop to give a larger importance to mobile multimedia systems. The MMSys was held Wednesday and Thursday, and MoVid workshop was held on Friday, February 24. This year, the organizers also mixed long paper presentations with short paper presentations in various categories. In addition, the conference introduced demos and posters in comparison to previous years. Several emerging topics were presented in addition to 3D content, DASH protocol for video streaming, adaptation, and other traditional multimedia system topics. Examples of emerging topics

and papers are “Multi-video summer and skim generation of sensor-rich videos in geo-space”, “Scheduler support for Video-oriented multimedia on client-side virtualization”, and “P2P streaming: a study on the use of advertisements as incentives”.

2.4. **ACM ICMR 2012** (<http://www.icmr2012.org/>)

In addition to the best paper award and best paper candidates in the “Best Paper Session”, which represent significant papers and contributions (see Section 1.2), the conference also had an extensive poster and demo session with traditional multimedia retrieval topics, but also mobile multimedia became much more dominant. Examples were “nepDroid: An Intelligent Mobile Music Player”, search engine for mobile and desktop environments “One Size Does Not Fit All – Multimodal Search on Mobile and Desktop Devices with the I-SEARCH Search Engine”, “Mobile Image Browsing on a 3D Globe”, and others.

2.5. **ACM MM&Sec 2011** (<http://www.mmsec10.com/>)

In this SIGMM-sponsored workshop, held in Buffalo, New York, USA, September 29-30, the researchers discussed aspects of biometrics in travel documents, forensics approaches, biometric devices, and security aspects for document preservation.

3. Significant programs

Throughout the SIGMM-sponsored conferences we had several significant programs that provided a springboard for future technical efforts:

3.1. **ACM Multimedia 2011**

- Highlight of this conference was again the **Multimedia Grand Challenge program** organized for the third time as a part of the conference program. Multimedia Grand Challenge is a set of problems and issues from a number of industry leaders geared to engage the multimedia research community in solving relevant, interesting and challenging questions about the industry’s 2-5 year horizon for multimedia. Researchers were encouraged to submit working systems in response to the challenge. A large number of submissions were received for this first edition of the competition. We will be continuing with this challenge in ACM Multimedia 2012.
- **Open Source Competition** included this year **educational** component.
- **Doctoral Symposium** encouraged all student authors to participate.
- We would also like to highlight the “**Industrial Exhibit**” and “**Industrial Panels**” programs as well as the “**Doctoral Symposium panel**” on “Job opportunities and career perspective for fresh graduates of the multimedia community.
- With nine well-attended tutorials and two other panels, the “Tutorials” and “Panels” programs were very success.

3.2. **ACM MMSys 2012**

There were *two interesting keynote talks* talking about large scale video distribution systems. One keynote speaker was Dr. Deepak Turaga from IBM Watson Research Laboratory and the second speaker was Dr. Leonidas Kontothanassis from Google, both giving very interesting industrial perspectives on video distribution.

MMSys 2012 also continued with the gathering, advertising and disseminating very interesting **datasets** such as “6DMG: A New 4D Motion Gesture Database” (team from Georgia Tech), “DASH Datasets” (team University of Klagenfurt, Austria), and “Network Traffic from Anarchy Online: Analysis, Statistics, and Applications” (team from U. Oslo and Simula Research Laboratory, Norway)

3.3. **ACM ICMR 2012**

The conference continued with the “*Practitioner Day*” bringing in industry researchers and discussing problems faced by the practitioners.

The SIGMM-sponsored ACM ICMR 2012 conference had two interesting special sessions with interesting papers. One was on the “**Social Events in Web Multimedia**” and the second was on “**Socio-Video Semantics**”. The most significant paper in the “Socio-Video Semantics” session was also the Best Paper of the conference, the “Linked Event Concept Detection with Viewer Demographics”.

4. Innovative programs

Several SIGMM-sponsored conferences had innovative programs which provided service to technical community:

4.1. **ACM Multimedia 2010**

- **Open Source Competition** brings major service to technical community since software is then released to the community with corresponding agreements in place.
- We have organized the “**Networking of Multimedia Women**” event with a specific discussion theme “Beyond Epsilon Science: Where To Look and How to Realize New Opportunities” which included a panel of leading female multimedia researchers, Prof. Svetha Venkatesh, Prof. Nalini Venkatasubramanian, Dr. Dulce Ponceleon, Prof. Susanne Boll and Dr. Maria Zemankova.
- We have providing state of the **art tutorial presentations free** (because of all inclusive registration fees) to conference participants.
- We have provided **1 year complimentary SIGMM membership** to all participants (except student registrations).
- The registration allowed **free access to all workshops** held along with MM'11 for all participants (including students) which increased the attendance of workshops.
- All accepted papers for oral presentation (workshops and conference) were included in the **Poster Plenary Sessions**.

4.2. **ACM MMSys 2012**

The **co-location of the MoVid** workshop with MMSys'12 worked very well. Many participants stayed the full three days and attended the various presentations of the Mobile Video (MoVid) Workshop. The reason was that the mobile multimedia is a very hot topic currently, as well as the papers, panel and **keynote speaker, Jim van Welzen from NVIDIA** talked about innovative commercial multimedia applications which was very motivating.

4.3. **ACM ICMR 2012**

The organizers invited attendees to interesting special sessions on innovative and frontier topics the “**Social Events in Web Multimedia**” and “**Socio-Video Semantics**”.

The industry session of the “**Practitioner Day**” had several interesting topics ranging from “Contextual Internet Multimedia Advertising” from Microsoft Research to “From Big Data to Deep Knowledge” from Huawei (large Cisco telco) new research lab in Hong-Kong, named the “Noah's Ark Lab”.

5. Brief summary for the key issues that the memberships of SIGMM will have to deal with in the next 2 years

The key issues are:

- a. Execute special events to **celebrate 20th anniversary** of ACM Multimedia conference in 2012 in Nara, Japan.
 - a. We are preparing a **plenary panel** at the ACM Multimedia 2012 and a **special issue in TOMCCAP** to celebrate the 20th anniversary.
- b. Come up with a **sustainable funding model** for the **multimedia art community** within the SIGMM community and their participation at our premier ACM Multimedia conference.
- c. Expand SIGMM presence in various social networks.
 - a. At ACM Multimedia 2011, we had used **Twitter** to collect opinions, **Facebook**, the **SIGMM website**, and other social networks (see website) to increase presence of the conference and other SIGMM events, but more needs to be done.
 - b. Good examples to continue and expand are: At ACM Multimedia 2011 we have introduced the **social media award**, and more needs to be done. At ICMR'12, **photo-slide presentation** has been prepared and posted on the conference website.
- d. Increase **industry participation** in SIGMM activities to strengthen ties and increase impact between industry and academia.
 - a. ACM Multimedia 2011 brought in "**Industry Exhibits and Technical Demos**" together. The **Open Source Software Challenge** is a very strong program to accomplish the goal. The **Industrial Panel** "Innovating the Multimedia Experience" discussed innovation in industry and how to innovate new multimedia experience.
 - b. ACM ICMR 2012 did a good job with the "**Practitioner Day**", although it was shorter and with less industry representation than in the previous year.
 - c. ACM MMSys 2012 brought again **keynote speakers** from IBM, Google, and MoVid'12 invited NVIDIA speaker which provided very strong industrial relevance to the multimedia systems research.
 - d. ACM NOSSDAV 2011 had Google keynote speaker.
- e. Automate process for talks content, web, other **SIGMM material preservation** at SIGMM venues. We have established preservation committee for ACM Multimedia conference as part of the organizing committee, but for other SIGMM-sponsored events, we do not have organized effort and it depends on the chair and culture of the conference. We need to do more in this area.
 - a. ACM MMSys 2012 did a very good job collecting all slides of presenters and shared the slides on the conference website.
- f. Increase **SIGMM participation of female researchers**. We have started to go in this direction at ACM Multimedia event, but other SIGMM-sponsored events do not have coordinated events, and we need to do more.
 - a. We have started this task with **lunch at ACM Multimedia 2010**, the event "**Networking of Multimedia Women**" including a discussion and panel at ACM Multimedia 2011 and we are planning an activity at ACM Multimedia 2012.
 - b. SIGMM has partnered with **ACM-W** to fund one female student to attend the premier SIGMM conference in her area of interest.
- g. Build up the next generation of **SIGMM volunteers** to serve as SIGMM officers, chairs, leaders of various SIGMM sponsored activities and venues.
 - a. We have a very active group of volunteers that drive very diverse activities of ACM SIGMM, but we need to bring new members in.
- h. Consider **additional SIGMM-wide award(s)** to recognize wider multimedia community achievements such as service, education, mid-level research achievements, etc. The goal

is to propose SIGMM Educational Award, “Test of Time Paper Award”, and “Rising Star Award” over the next few years.

- i. Start **SIGMM election** preparation, since in June 2013, new SIGMM officers need to be elected. The goal is to put forward volunteers who will stand in the election for three positions: SIGMM Chair, SIGMM Vice Chair and SIGMM Director of Conferences. After election, provide a smooth transition of activities, tasks and responsibilities to the new SIGMM officers. Klara Nahrstedt will serve as the SIGMM Nomination Committee chair.
- j. Ensure **location selection for ACM Multimedia 2015** in Asia and assist with preparation of ACM Multimedia 2013 in Barcelona, Spain.

6. Other Highlights in SIGMM activities

- a. Prof. Mohan Kankanhalli, the SIGMM Director of Conferences, executed with the team of ACM Multimedia 2011 what was proposed by the **review committee** which was charged to review the efficiency and organization of our premier ACM Multimedia conference. The chair of the committee was Prof. Tat-Seng Chua. The committee **reviewed two aspects of ACM Multimedia** and related conferences: (a) the conference organization and (b) the procedures for the management and review of papers for the SIGMM-sponsored conferences. The recommendations were successfully implemented for the first time at ACM Multimedia 2011 conference, held in Scottsdale, Arizona.
- b. The streamlined process for the ACM Multimedia conference location bidding works very well. This year at ACM Multimedia 2011, we have decided that **ACM Multimedia 2014** will in Orlando, Florida, USA.
- c. Our SIGMM e-newsletter, called SIGMM Records, has **variety of articles on multimedia tools, PhD theses abstracts**, announcements, **SIGMM Educational Column** featuring various courses in multimedia area, and many other information. It is a tremendous resource to the community.
- d. We have made significant progress in **SIGMM preservation efforts** via the preservation committee, led by Dr. Mohamed Hefeeda, who set up a website to preserve past SIGMM-sponsored venues as well as establish processes towards presentation of SIGMM-sponsored venues and their websites, proceedings, etc.
- e. The Editor-in-Chief for ACM Transactions on Multimedia Computing, Communications and Applications, Dr. Ralf Steinmetz, received an approval from ACM Pub Board to start the new **ACM TOMCCAP Nicolas Georganas named award** for “Best Paper of the Year” published in ACM Transactions on Multimedia Computing, Communications, and Applications.
- f. The **SIGMM-specific educational committee** compiles and keeps up-to-date educational material in the area of multimedia computing, communications, and applications. This effort is led by Dr. Wei Tsang Ooi. This committee now has an editor on the SIGMM e-newsletter editorial board to bring articles on multimedia education to a broader community.
- g. The **SIGMM chapter in China** is flourishing. The chapter’s own conference, International Conference on Internet Multimedia Computing and Communication (ICIMCS 2010) had its second event December 30-31, 2010 in Harbin, China, and the 3rd ICIMCS 2011 was in August 5-7, 2011 in Chengdu, China. The 4th ICIMCS event will be September 9-11, 2012 in Wuhan, China.
- h. All SIGMM-sponsored events had a very strong **government and industry sponsorship** and/or industry participation via talks, papers, demonstrations, including National Science Foundation, and companies such as Microsoft Research, FXPai, Yahoo!, Google, HP Labs, Springer, Technicolor, IBM Research, RICOH Innovations, Callas, 3D Life, Technicolor,

CEWE, Deutsche Institute – Florence, British Columbia Arts Council, Provincia Di Firenze, Ente Cassa Di Risparmio Di Firenze, and others.

- i. SIGMM had a number of **conferences/workshops in-cooperation** such as the International Conference on Distributed Smart Cameras (ICDSC 2011) and with it collocated International Working Conference on Advanced Visual Interfaces (AVI) 2011, 10th Annual Workshop on Network and Systems Support for Games (NetGames) 2011, and others. Note that 13 workshops have been associated with ACM Multimedia 2011, i.e, co-sponsored with SIGMM organization.
- j. The **ACM Multimedia 2011** conference had around 617 attendees, it had 58 long papers with acceptance rate of 17.3%, and it had 120 short papers with an acceptance rate of 36.3%.

SIGMOBILE FY'12 Annual Report
July 2011 - June 2012
Submitted by: Roy Want, Chair

Introduction

In 2012 mobile computing continues to be one of the fastest growing and exciting areas of computer science. Engaging with the mobile industry and mobile academic research community, SIGMOBILE is the ACM Special Interest Group on the Mobility of Systems, Users, Data, and Computing. Its scope includes all aspects of mobile computing and communications, such as mobile systems and applications, wireless networking protocols and algorithms, and mobile information access and management. SIGMOBILE has healthy finances, is well respected, and supports successful conferences, workshops, and publications. These are all valuable services for its members and the community, resulting in a strong, vibrant SIG, with significant membership. In Fall 2011, SIGMOBILE underwent its four-year viability review, and passed successfully allowing it to continue for another 4 years.

The current elected officers in SIGMOBILE's Executive Committee are:

- Chair: *Dr. Roy Want* (Google Inc, USA);
- Vice Chair: *Prof. Robert Steele* (University of Sydney, Australia);
- Secretary: *Prof. Ramesh Govindan* (University of Southern California, USA); and
- Treasurer: *Prof. Lili Qiu* (University of Texas at Austin, USA).

This is the third year the Executive Committee has served since the 2009 elections, and includes the Past Chair, *Prof. David B. Johnson* (Rice University, USA).

Committee Appointed Positions

SIGMOBILE's leadership has four committee appointed positions:

- Editor-in-Chief (EIC) for SIGMOBILE's journal/newsletter for our members (*Mobile Computing and Communications Review* or MC2R), *Prof. Suman Banerjee* (Univ. of Wisconsin, Madison, USA)
- Information Director *Prof. Robert Steele* (University of Sydney, Australia),
- Digital Library Coordinator: *Dr. Guanling Chen* (University of Massachusetts Lowell, USA),
- Outstanding Contribution Award Committee Chair: Edward W. Knightly (Rice University, USA)

ACM Mobility Tech Pack: Released December 2011

In early 2011, at the request of the ACM publishing group we started working on a Mobility Tech Pack with a view to making it available by 2012. ACM Tech Packs are "innovative learning packages by subject experts for serious computing professionals", basically an annotated reading list of the most useful papers for students or professionals wanting to enter the field, or refresh their knowledge about the latest significant publications in the area. We are pleased to announce that in December 2011 the Mobility Tech Pack was released on the ACM website and can be found at <http://techpack.acm.org/mobility/>. In January 2012, additional supporting materials were added, providing a podcast interview, with transcript, given by the SIGMOBILE Chair, and collateral materials such as notable mobile websites, blogs, videos and other related mobile computing references.

ACM's New Learning Webinar Series

SIGMOBILE helped to launch ACM's new Learning Webinar series, when on January 26, 2012, David B. Johnson, SIGMOBILE's Past Chair, served as the moderator for the pilot webinar in the series. This webinar, entitled "The Cloud in Your Hands: Marriage of Cloud Computing with Smart Devices," was presented by Arjmand Samuel and Danny Dalal of Microsoft Research. Designed for IT managers and developers, this session provided an introduction to the new world of cloud-enabled mobile computing. There were more than 4700 registrations for this pilot webinar, 816 live attendees, and over 956 on-demand attendees. The ACM Learning Webinars are provided as a part of ACM's Learning Center.

New SIGMOBILE RockStar Award

The SIGMOBILE RockStar award recognizes an individual who has made recent outstanding research or product contributions to the field of mobile computing during the early part of his or her career.

AWARD CRITERION: The SIGMOBILE RockStar Award recognizes one or more recent technical contribution(s) made in the early part of a mobile computing researcher's career, resulting in notable influence on our field. Early career for an individual is defined as within 10 years of receiving their highest university degree, while being younger than 40 years of age at the time of the nomination.

Selection is based on the impact of the candidate's work in creating promising new ideas, paradigms, and tools, related to mobile computing. Depth, impact, and novelty of the individual's contributions will be key criteria upon which the RockStar Award Committee (RAC) will evaluate the nominees.

NOMINATION PROCESS: Following an open call for nominations, nominations should be addressed to the chair of the RockStar Awards Committee. The nominator should solicit recommendations from colleagues in the field who are most familiar with the nominee's achievements.

Each nomination should consist of the following items:

1. Name, phone number, and email address of the person making the nomination.
2. Curriculum vitae of the nominee, including name, phone number and email address.
3. A brief citation, no more than 150 words long.
4. A statement, no more than 500 words long, on why the candidate deserves the award.
5. Minimum of three and maximum of five supporting letters from individuals who endorse the nomination. The recommender should identify the rationale for the nomination and by what means they know of the nominee's work. Endorsement letters may be sent in the form of emails and should not be more than 400 words.

The nominations will be reviewed by the RockStar selection committee:

- Self-nominations will not be accepted.
- The nominee need not be a member of SIGMOBILE, but the nominator must be a member of SIGMOBILE
- Officers of SIGMOBILE and members of the RAC are not eligible for this award.
- The nominator and endorsers may not serve on the selection committee.
- Nominations that did not result in an award can be resubmitted and updated in later years.
- Previous recipients are not eligible for future nominations.

SELECTION COMMITTEE: The RockStar Award Committee will have 9 members, including winners from the past 5 years, a RAC Chair and three senior community leaders appointed by the RAC

Chair. The RAC Chair will be appointed, or reappointed, by the ACM SIGMOBILE Chair as appropriate to maintain a healthy functioning of the RockStar award process. In the first few years of the award the SIGMOBILE Executive Committee will fill in the role of past winners. On reaching steady state, each member will serve a 3-year term.

RECOGNITION: The award will be presented annually at one of SIGMOBILE's conferences during the ensuing year following selection of a winning nomination. The RAC reserves the right not to make an award if a suitable candidate has not been found in that year. An announcement including the citation and bio of the winner will be distributed on SIGMOBILE's mailing list. The winner will be invited to deliver a presentation on the topic of his or her choice at a SIGMOBILE event, where he or she will receive a custom-made trophy/plaque, a permanent acknowledgement with citation on SIGMOBILE's web page, a monetary award of similar value to the OCA (funded by the strong SIGMOBILE fund balance, and will be included in the annual budget planning), and well-deserved bragging rights.

Sponsorship for the Mobile Computing Research Community

In 2011-12, SIGMOBILE has provided sponsorship in the form of financial support for three programs in the mobile computing research community:

- **The Community Resource for Archiving Wireless Data At Dartmouth (CRAWDAD)** continues to be a thriving resource for the SIGMOBILE community. At the end of July 2012 it contains 83 datasets, each containing one or more traces for wireless networks or mobile users; and 23 tools, many of which are designed to help researchers work with these datasets. There were 13 new datasets released since the last report, and there are currently 4 datasets in pipeline for publication. There are over 4,200 users from 88 countries around the world -- 11 new countries since last year's report! CRAWDAD continues to be increasingly popular, with more than 1,000 new users registering within the past year. Although the primary archive is at Dartmouth, the CRAWDAD site and data are mirrored on servers located in the UK and Australia, to guarantee uninterrupted service and fast downloads to users all around the world.

CRAWDAD data has supported over 700 papers in the field, and continues to be the go-to place for authors wishing to share data they've collected, or to obtain data they can use for testing their system prototypes and algorithms. SIGMOBILE funding makes it possible for the CRAWDAD project to retain a technical staff person (part time) to add new data sets, maintain the site, and develop new features.

This year, CRAWDAD's NSF support ended; SIGCOMM has joined SIGMOBILE in keeping CRAWDAD running.

- **Networking Networking Women (N2 Women)** is a discipline-specific community for researchers in the communications and networking research fields. The main goal of N2 Women is to foster connections among the under-represented women in computer networking, and related research fields. N2 Women allows women to connect with other women who share the same research interests, who attend the same conferences, who face the same career hurdles, and who experience the same obstacles. To assist in its networking goals, N2 Women has an email list for the group: N2Women@acm.org; currently there are over 580 members.

N2 Women is an ACM SIGMOBILE program that has been financially supported by SIGMOBILE Microsoft Research, HP Labs, NSF, and CRA-W. In the past year, funds from SIGMOBILE were used for the N2 Women Student Fellowship program. A student applies for a Fellowship and, if selected, N2 Women partially covers the student's travel cost (up to \$500) to a conference where an N2 Women event will be held. In exchange, the student must help organize the N2 Women meeting. The benefit of engaging in the organization, in

addition to the travel funds, is for the student to connect with the organizers of the conference who are, typically, leaders in the research field. The organization also arranges for a senior member of N2 Women to assist/mentor the student in this task.

During the past year (July 1st 2011 to June 30th, 2012), there have been eight N2 Women Student Fellowships with organized N2 Women events at the following conferences:

Ouldooz Baghban Karimi, Simon Fraser University, Canada (SIGCOMM 2011)
Mikie Han, UT Austin (MobiCom 2011)
Soudeh Ghorbani, UIUC (SenSys 2011)
Aakanksha Chowdhery, Stanford University (Globecom 2011)
Yanyang Zhuang, University of Victoria, Canada (Infocom 2012)
Sanorita Dey, University of South Carolina (MobiHoc 2012)
Zahra Ahmadian, Winnie Ye, Melike Erol-Kantarci, Yujin Li (ICC 2012)
Jingyao Zhang, Virginia Tech (SECON 2012)

Also thanks to support from SIGMOBILE, N2 Women held the 2nd Networking Networking Women Workshop on March 25, 2012 in conjunction with Infocom in Orlando, Florida. The breakdown of the 65 female attendees was as follows: 47 students (72%), 13 faculty (20%), and 5 researchers from industrial/government labs (8%). Overall, there were 40 institutions represented by the attendees. Participants came from all over the US and from as far away as China, with the following countries represented: United States, Canada, China, Hong Kong, Germany, Italy, Pakistan, and Tunisia.

In all N2 Women announcements, SIGMOBILE (and other sponsors of N2 Women) are thanked. Further details of N2 Women are available at:
<http://committees.comsoc.org/n2women/>.

- **ACM-W:** In 2012, SIGMOBILE continues to sponsor ACM-W (ACM's Women in Computing organization). "ACM-W's mission is to celebrate, inform and support women in computing, and work with the ACM-W community of computer scientists, educators, employers and policy makers to improve working and learning environments for women." This is an organization that the Executive Committee (EC) whole-heartedly supports. Women in CS education can request sponsorship for SIGMOBILE conferences, and the EC will provide sponsorship for travel and registration.

SIGMOBILE Conferences and Workshops

SIGMOBILE currently sponsors or co-sponsors five annual conferences, all recognized as the premier conferences and focus areas within the field:

- *MobiCom:* The Annual International Conference on Mobile Computing and Networking, covers all areas of mobile computing and mobile and wireless networking at the link layer and above. MobiCom has been held every year since 1995.
- *MobiHoc:* The ACM International Symposium on Mobile Ad Hoc Networking and Computing, addresses the challenges emerging from wireless ad hoc networking and computing, with the focus being on issues at and above the MAC layer. MobiHoc has been held every year since 2000.
- *MobiSys:* The International Conference on Mobile Systems, Applications, and Services, addresses broad systems research issues in mobile computing and mobile networking, particularly valuing the practical experience gained from designing, building, and using mobile systems, applications, and services. MobiSys has been held every year since 2003.
- *SenSys:* The ACM Conference on Embedded Networked Sensor Systems, focuses on systems issues in the emerging area of embedded, networked sensors, spanning multiple disciplines, including wireless communication, networking, operating systems, architecture,

low-power circuits, distributed algorithms, data processing, scheduling, sensors, energy harvesting, and signal processing. SenSys has been held every year since 2003.

- *UbiComp*: The International Conference on Ubiquitous Computing, addresses the interdisciplinary field of ubiquitous computing, which utilizes and integrates pervasive, wireless, embedded, wearable and/or mobile technologies to bridge the gap between the digital and physical worlds. UbiComp has been held every year since 1999, and SIGMOBILE began sponsoring it in 2009.

MobiCom 2011, the 17th Annual International Conference on Mobile Computing and Networking was held at the Mirage Hotel, September 19th-23rd, 2011, in Las Vegas, Nevada, USA. Parmesh Ramanathan (University of Wisconsin, Madison, USA) served as General Chair, and Thyaga Nandagopal (Bell Laboratories, Alcatel-Lucent, USA) and Brian Levine (University of Massachusetts at Amherst, USA) served as the Program Co-Chairs.

The technical program featured two plenary speakers: On the first day Rajit Gadh (Henry Samueli School of Engineering and Applied Science at UCLA) presented on the UCLA project "SmartGRID", and on the last day, Farnam Jahanian (University of Michigan, NSF) presented, "Innovating for Society: Realizing the Promise and Potential of Computing". The MobiCom 2011 program also included two days of workshops:

On Monday, September 19th:

- The Third Workshop on Cognitive Wireless Networking (CoRoNet)
- The Third International Workshop on Wireless of the Students, by the Students, and for the Students (S3 2011)
- The Sixth ACM International Workshop on Wireless Network Testbeds, Experimental evaluation and Characterization (WiNTECH 2011)

And Friday, September 23rd:

- The Sixth Workshop on Challenged Networks (CHANTS 2011) (CFP)
- The Eighth ACM International Workshop on Vehicular Inter-NETworking (VANET 2011)

MobiCom 2012 will be held August 22nd-26th, at the Hilton Hotel, Istanbul, Turkey.

MobiHoc 2011, the 12th International Symposium on Mobile Ad Hoc Networking was held in Paris, France from May 16-19th, 2011. The MobiHoc 2011 General Chair was Philippe Jacquet, INRIA Paris-Rocquencourt, France), and the Program Co-Chairs were: Konstantina (Dina) Papagiannaki (Intel Labs Pittsburgh, USA), Devavrat Shah, (MIT, USA).

The technical program featured an opening keynote talk, "Sense and Sensibility for Mobile Networks" by Prof. Hari Balakrishnan, at the Massachusetts Institute of Technology (MIT), and on the second day Prof. Jean Walrand (UC Berkeley), presented "Distributed Wireless Protocols: A Review". The MobiHoc 2011 program also included a day of workshops, and tutorials:

There were two international workshops on Monday, May 16th:

- Tactical Mobile Ad Hoc Networking
- Pervasive Wireless Healthcare

Accompanied by two Tutorials:

- (AM) "Random Matrix Theory for Wireless Communication", by Merouane Debbah
- (PM) "Designing Ad Hoc Networking with Application Constraints", by Christophe Guettier.

MobiHoc 2012 is reported below; when it changed its annual event from Sept 2010, to May 2011 it pushed both events (2011 & 2012) into the July 2011-2012 report.

MobiHoc 2012, the 13th *International Symposium on Mobile Ad Hoc Networking* was held Hilton Head Island, South Carolina, USA from June 11-14th, 2012. The MobiHoc 2012 General Chair was Asis Nasipuri (North Carolina at Charlotte); and the Program Co-Chairs were Yih-Chun Hu (University of Illinois at Urbana-Champaign), and Sanjay Shakkottai (University of Texas at Austin, USA).

The conference provided two keynotes: On day one, Prof. Edward Knightly presented a keynote: "Urban-Scale Wireless Networks in Unlicensed sub-GHz Bands"; and on day two, Prof. Nitin Viadya presented on the topic of "Resilient Distributed Consensus".

The MobiHoc Program featured four workshops on Monday, June 11th:

- W1: Airborne Networks and Communications Emerging
- W2: Emerging Name-Oriented Mobile Networking Design: Architecture, Algorithms, and Applications.
- W3: The 2nd Int. Workshop on Pervasive Wireless Healthcare
- W4: 1st Int. Workshop on Sensor-Enhanced Safety and Security in Public Spaces (SESP 2012)

One Wednesday June 13th, a Networking Networking Women (N2Women) meeting was held as a Luncheon.

The MobiHoc 2013 conference is currently being planned, but at this time no details are available.

MobiSys 2012, the 10th *International Conference on Mobile Systems, Applications, and Services*, was held June 25th – 29th, 2012, in Low Wood Bay, The Lake District, United Kingdom, in-cooperation with SIGOPS. Prof. Nigel Davies (Lancaster University, UK) served as the General Chair, and Prof. Srinivasan Seshan (Carnegie Mellon University, USA) and Prof. Lin Zhong (Rice University, USA) served as the Program Co-Chairs.

The MobiSys 2011 technical program began with a keynote talk by Dr. Paul Jones, who is the National Health Service (NHS) Chief Technology Officer and is responsible for the Technology Office in the Department of Health Informatics Directorate, and presented "Mobile Health Challenges". Paul described the challenges of introducing mobile technology into one of the largest organizations in the world, with an annual budget of 110 billion pounds (taxation funded).

The MobiSys program also featured 4 workshops and a PhD Forum on Monday, June 25th, and a fifth workshop on Friday, June 29th:

- W1: VANET 2012 - The 9th International Workshop on VehiculAr Inter-NETworking, Systems, and Applications
- W2: HotPlanet 2012: The 4th International Workshop on Hot Topics in Planet Scale Measurement
- W3: 1st ACM Workshop on Mobile systems for Computational Social Science
- W4: MCS 2012: The 3rd International Workshop on Mobile Cloud Computing & Services
- PhD Forum on Mobile Systems, Applications, and Services
- W5: Next generation mobile computing for dynamic personalized travel planning

MobiSys 2013 is being planned for June 2013 in the Taipei, Taiwan. The General Co-Chairs will be Prof. Hao Hua Chu and Prof. Polly Huang both from the National Taiwan University, Taiwan, and

Program Co-chairs: Dr. Feng Zhao (Microsoft Research, China) and Prof. Romit Roy Choudhury (Duke University, USA)

SenSys 2011, the 9th ACM Conference on Embedded Networked Sensor Systems, was held November 1-4, 2011, in Seattle, Washington, USA. Jie Liu (Microsoft Research, USA) served as the General Chair, and Philip Levis (Stanford University, USA), Kay Romer (University of Luebeck, Germany) served as the Program Co-Chairs. SenSys is co-sponsored by SIGMOBILE and SIGCOMM (30% each); and SIGARCH, SIGOPS, SIGMETRICS, and SIGBED (10% each) and the NSF.

A keynote presentation by **Michel M. Maharbiz (EECS, UC Berkeley, USA)** was given on the opening day "Cyborg beetles: building interfaces between the synthetic and the multicellular".

There were three workshops and a Doctoral Colloquium held on Monday, 1st November.

- W1: BuildSys'11: The 3rd ACM Workshop on Embedded Sensing Systems for Energy Efficiency in Buildings
- W2: PhoneSense'11: The 2nd International Workshop on Sensing Applications on Mobile Phones
- W3: **mHealthSys: International Workshop on Mobile Systems, Applications, and Services for Healthcare**
- Doctoral Colloquium 2011: a forum to provide a friendly, supportive, and constructive atmosphere where PhD students can present their research-in-progress for an open discussion, guided by a panel of experienced researchers and practitioners.

In addition, the SenSys 2011 program included an N2 Women Event on Wednesday, November 2nd.

SenSys 2012 will be held November 6-9th, 2012, in Toronto Canada. General Chair: Rasit Eskicioglu (University of Manitoba); Program Co-Chairs: Andrew T. Campbell (Dartmouth College) Koen Langendoen (Delft University of Technology).

UbiComp 2011, the 13th International Conference on Ubiquitous Computing was held September 17th-21st, 2011, in Beijing, China, and co-sponsored with SIGCHI. James Landay (University of Washington, USA & Microsoft Research Asia, China), and Yuanchun Shi (Tsinghua University, China), served as the General Co-Chairs. Don Patterson (University of California Irvine, USA), Yvonne Rogers (University College London, UK), and Xing Xie (Microsoft Research Asia, China) served as the Program Co-Chairs.

A keynote presentation launched the conference: Jan Chipchase (Executive Creative Director of Global Insights at Frog design) presented "Uberrima Fides". Jan used the keynote to explore the impact of technologies past, present and future and outline the skills required to build the next generation of tech.

UbiComp'11 also supported a Doctoral Colloquium (Saturday, 17th September) along with 12 all-day workshops on Sunday, 18th September (note W7 & W8 were cancelled in the list below):

- W01: 2nd Int. Workshop on Ubiquitous Crowdsourcing: Towards a Platform for Crowd Computing
- W02: Mobile Sensing: Challenges, Opportunities and Future Directions
- W03: Workshop on 'Research in the Large': Using App Stores, Wide Distribution Channels & Big Data in UbiComp Research

- W04: The 1st International Workshop on Mobile Location-Based Service (MLBS)
- W05: Int. Workshop on Networking and Object Memories for the Internet of Things (NOME-IoT 2011)
- W06: Casemans 2011: The 5th Int. Workshop on Context-Awareness for Self-Managing Systems
- W09: The 1st International Symposium on Social and Community Intelligence (SCI-11)
- W10: PETMEI 2011: 1st International Workshop on Pervasive Eye Tracking and Mobile Eye-Based Interaction
- W11: The Role of Design in UbiComp Research and Practice
- W12: International Workshop on Situation, Activity and Goal Awareness (SAGAware2011)
- W13: Ubiquitous Affective Awareness and Intelligent Interaction
- W14: Trajectory Data Mining and Analysis

UbiComp 2012 will be held in Pittsburgh, Pennsylvania, USA, on September 5th-8th 2012. The General Chair is Anind K. Dey (Carnegie Mellon University, USA), and the Program Co-Chairs are Hao-Hua Chu (National Taiwan University, Taiwan), and Gillian Hayes (University of California, Irvine, USA)

In addition to the conferences and co-located workshops above, SIGMOBILE also sponsors the HotMobile workshop (previously known as WMCSA) as a stand-alone event, not co-located with a conference. The HotMobile workshop series focuses on mobile applications, systems, and environments, as well as their underlying state-of-the-art technologies, in a small workshop format that makes it ideal for presenting and discussing new directions or controversial approaches. The Executive Committee encourages the MobiCom Program Committee meeting be collocated with HotMobile to ensure a representative selection of senior researchers attend the event. This workshop was previously sponsored each year by the IEEE Computer Society, but has been sponsored instead by ACM SIGMOBILE since HotMobile 2008.

HotMobile 2012, *the 13th International Workshop on Mobile Computing Systems and Applications*, was held February 28-29th, San Diego, California, USA. Prof. Gaetano Borriello (University of Washington, USA) served as the General Chair, and *Rajesh Krishna Balan (Singapore Management University, SG)* served as the Program Chair. The HotMobile 2012 technical program featured a keynote by Mr. Robert Gilmore (Vice President, Engineering, QUALCOMM, Inc) entitled, "Your Life on a Smartphone".

HotMobile 2012 also included a Doctoral Consortium mixed in with the sessions on the first day, providing feedback on students' current research and guidance on future research directions, offering each student comments and fresh perspectives on their work from faculty and students outside their own institution, and promoting the development of a supportive community of scholars and a spirit of collaborative research. The MobiSys 2012 program committee meeting was held the day following HotMobile to encourage participating senior researchers to attend HotMobile, widen the discussions, and support the Doctoral Consortium.

HotMobile 2013 will be held February 26-27th, 2013, in Jekyll Island, Georgia, USA. The General Chair is Sharad Agarwal (Microsoft Research, USA), and the Program Chair is Alexander Varshavsky (AT&T Labs, USA).

SIGMOBILE also sponsored the following high-value events over the last year. These are annual decisions and sponsorship one year does not guarantee support in a following year. If the standard remains high, SIGMOBILE is likely to continue with its support.

- MobiOpp 2012: The 3rd Int. Workshop on Mobile Opportunistic Networking (ACM MobiOpp 2012), Zurich Switzerland, 15-16 March 2012.
- FOMC 2011: The Seventh International Workshop on Foundations of Mobile Computing, June 9th, 2011, San Jose, USA
- WUWNet 2011: The Fifth ACM International Workshop on Underwater Networks, December 1st-2nd 2011, Seattle, Washington, USA.

Each year, SIGMOBILE is also "in-cooperation" with a number of different events sponsored by other organizations. Events offered "in-cooperation with" SIGMOBILE allow its members to register at the same discounted rate as for members of other sponsoring organizations for the event, providing a significant savings to SIGMOBILE members. During this past year (July 2011 through June 2012), SIGMOBILE was in-cooperation with the following events:

- MobileHCI 2011: 13th International Conference on Human-Computer Interaction with Mobile Devices and Services. August 30th – September 2nd, 2011 in Stockholm, Sweden.
- Wireless Health 2011, October 10-13th, 2011; UC San Diego Campus, La Jolla, CA, USA.
- MobiHeld 2011: 3rd ACM Workshop on Networking, Systems and Applications on Mobile Handhelds, Oct 23rd, 2011, Cascais, Portugal.
- ACWR'11, First International Conference on Wireless Technologies for Humanitarian Relief, December 19-21st, 2011, Amrita University Campus, India.
- COMSNETS'12: The 4th International Conference on COMMunication Systems and NETWORKS: The Chancery Pavilion Hotel, Bangalore, India, January 3rd-7th, 2012
- WiSec'12: The 5th ACM Conference on Wireless Security: Tucson, Arizona, USA, April 16-18th, 2012
- ISWC 2012: The Sixteenth Annual International Symposium on Wearable Computers: Newcastle, UK, June 18-22nd, 2012

In-cooperation commitments are also in place for MobileHCI 2012, San Francisco, USA, September, 21st-24th, 2012, DySPAN 2012, Bellevue, WA, USA, October, 16th-19th, 2012, Wireless Health Oct 23rd-25th, San Diego, California, USA, 2012 and COMSNETS 2013, Bangalore, India, January 7th-10th.

SIGMOBILE continues to be fortunate to receive strong support for its conferences and workshops in the period July 2011-2012, from leading-edge companies and organizations from around the world. This last year, the organizations that have contributed to SIGMOBILE conferences and workshops, helping to ensure their success, include:

Alcatel-Lucent, APL, Aquasent, AT&T Research, Autodesk, Disney Research, EDF, ETH Zurich, Euro-NF, Google Inc, Hitachi, HP Labs, HTC, IBM Research, IGRS, LIX, Microsoft Research (MSR), National Science Foundation of China, NEC, Nokia, NSF, Office of Naval Research (ONR), Opzoon, , SAFRAN, Shanda Innovations, Institute TELECOM SudParis, Intel Labs, Telezone, Technicolor, Teledyne Benthos, Toyota Technology Center USA, Tsinghua University Qualcomm, University of Cambridge, Vivick.

As always, SIGMOBILE is sincerely grateful for all contributions.

SIGMOBILE Publications

In addition to the proceedings for each of the conferences and workshops that SIGMOBILE sponsors, SIGMOBILE also publishes a peer-reviewed, quarterly journal/newsletter for SIGMOBILE members, *Mobile Computing and Communications Review* (MC2R). Others may also subscribe to MC2R, and MC2R is available in the ACM Digital Library.

The Editor-in-Chief for MC2R is *Prof. Suman Banerjee* (University of Wisconsin-Madison, USA). The current Area Editors for MC2R are *Dr. Sharad Agarwal* (Microsoft Research, USA), *Prof. Aditya Akella* (University of Wisconsin-Madison, USA), *Prof. Christian Bettstetter* (University of Klagenfurt, Germany), *Prof. Srdjan Capkun* (ETH, Zurich, Switzerland), *Prof. Augustin Chaintreau* (Columbia University, USA), *Prof. Eylem Ekici* (Ohio State University, USA), *Dr. Michelle Gong* (Intel, USA), *Prof. Marco Gruteser* (Rutgers University, USA), *Prof. Prashant Krishnamurthy* (University of Pittsburgh, USA), *Prof. Panos Papadimitratos* (EPFL, Switzerland), *Prof. Andreas Terzis* (Johns Hopkins University, USA), *Prof. Moustafa Youssef* (Egypt-Japan University of Science and Technology, Egypt), and *Prof. Lin Zhong* (Rice University, USA).

MC2R publishes articles that provide a balance between state-of-the-art research and practice, with a thorough pre-publication review of every article by experts in the field. Beyond papers reporting the latest research results in all areas related to SIGMOBILE's scope, MC2R keeps the SIGMOBILE community apprised of relevant happenings in the area, by providing regular features on the status of major international mobile computing and communications standards, such as those from IETF, ITU, ISO, and IEEE. The journal also provides a variety of additional resources, such as bibliographies of recent publications in other journals, paper and book reviews, workshop and conference reports, calls for papers, information on research groups throughout the world, bibliographies and locations of technical reports, and other general news in the field.

In addition, MC2R places a strong emphasis on quick publication of interesting completed, or work-in-progress, technical work; the average turnaround time for papers published in MC2R is about 6 months. Papers in MC2R are selected mainly from an ongoing open call for papers, plus special sections based on conferences and workshops, occasional special topic issues, and some invited papers. The acceptance rate for papers submitted through the open call for papers is quite selective, remaining under about 20%.

In the recent issues, the following are some example articles that were published in the different categories described above: (i) interviews (expert testimonies) of leading researchers in our field conducted by graduate students at different universities, (ii) a survey of the ongoing efforts in the IEEE 802.11ac and 802.11ad standards groups, (iii) articles capturing experiences of different research groups in building large-scale wireless test-beds, (iv) report on the student-run S3 workshop held at MobiCom 2011, and (v) a comment on an approach to judge the quality of different publication venues, e.g., conferences, workshops, and journals. In addition, for peer-reviewed articles that have been published in these issues, the editorial team has introduced a mechanism by which a summary of the reviews are included, along with an author response to these reviews is published as a companion to the final manuscript. This allows the publication to capture a greater fraction of the dialogue between the authors and reviewers in realizing the final version of the paper.

All aspects of the journal's operation are run entirely by volunteers, including final assembly of each issue.

SIGMOBILE Newsletter

SIGMOBILE also publishes a monthly E-Mail Newsletter for its members. This electronic newsletter was started in 2004 and is edited by SIGMOBILE's Information Director, Prof. Robert Steele (University of Sydney, Australia). The newsletter includes SIGMOBILE announcements, pointers to relevant mainstream news articles of interest to SIGMOBILE members, a calendar of upcoming

events of interest to our members, and pointers to developer news for active developers in the area of mobile computing and wireless networking.

SIGMOBILE Website

As an additional resource for our members and the community, SIGMOBILE maintains an extensive web site at <http://www.sigmobile.org>, including information about SIGMOBILE and its activities, information about our journal/newsletter MC2R, and information about membership in SIGMOBILE. This web site also contains archived copies of most SIGMOBILE conference web sites, including all previous years of MobiCom, MobiHoc, and MobiSys.

SIGMOBILE Social Media

During 2011-2012, SIGMOBILE has also furthered its social media presence to support new forms of interactive communication with its community. It has groups on LinkedIn and Facebook and has also created a new SIGMOBILE Twitter feed.

SIGMOBILE Local Chapters

There are currently three Local Chapters of SIGMOBILE chartered with ACM – none were added this year:

- *Nanyang Technological University Student Chapter*: This is a Student Chapter of SIGMOBILE, organized within the Nanyang Technological University (NTU) ACM club in Singapore.
- *Sydney Professional Chapter*: This is a Professional Chapter of SIGMOBILE, organized in Sydney, Australia.
- *Taiwan Chapter*: This is a University Based Chapter organized by Institute of Computer Science and Information Engineering, National I-lan University (NIU), Taiwan

Local Chapters provide a local focus to activities related to the area of SIGMOBILE, including mobile computing and wireless and mobile networking, and continue SIGMOBILE's work within their local regions.

We encourage interested groups around the world to form a SIGMOBILE chapter in their local community, school, city, or region. For details about the benefits and procedures for forming a Local SIGMOBILE Chapter, see <http://www.sigmobile.org/chapters/>.

SIGMOBILE Membership

The SIG's membership was 727 on June 30th 2012, exactly the same number from the previous year, but with a different distribution of student and professional memberships. The membership has spanned the 700-800 range for last 6 years, and for all time has been in the 437-872 range. SIGMOBILE provides substantial benefits to our members, including:

- The quarterly journal, and newsletter "Mobile Computing and Communications Review" (MC2R), which serves both as a newsletter keeping SIGMOBILE members informed, and as a scientific journal publishing high-quality peer-reviewed research papers on mobile computing and wireless and mobile networking.
- A monthly e-mail SIGMOBILE newsletter, including SIGMOBILE announcements, pointers to relevant mainstream news articles of interest to SIGMOBILE members, a calendar of upcoming events of interest to our members, and pointers to developer news for active developers in the area of mobile computing and wireless networking.

- Announcements via the moderated, members-only email distribution list, keeping you informed of the latest happenings in our field, such as conference Calls for Papers.
- Qualify for the lowest registration rates at conferences and workshops sponsored by SIGMOBILE, and for the many events that are "in cooperation" with SIGMOBILE. SIGMOBILE sponsors five conferences each year (MobiCom, MobiHoc, MobiSys, SenSys, and Ubicomp).
- Opportunities to share ideas, learn of new results and practices, network with colleagues, and be active in a vibrant community of colleagues in all areas of mobility of systems, users, data, and computing.
- Through the Member Value Plus program, automatically receive a CDROM after each of SIGMOBILE's five conferences, containing the full conference Proceedings.

In addition, SIGMOBILE provides additional benefits to the broader community served by SIGMOBILE:

- Organization and sponsorship of five annual conferences (MobiCom, MobiHoc, MobiSys, SenSys, and Ubicomp).
- Promotion of emerging new areas through sponsorship of numerous workshops each year.
- An ACM Mobility Tech Pack edited by the SIGMOBILE officers, providing an annotated reading list of the definitive mobile research papers to date; thus enabling somebody new to the field to rapidly come up to speed.
- The SIGMOBILE Outstanding Contribution Award, given to recognize an individual who has made a significant and lasting contribution to the research on mobile computing and communications and wireless networking.
- The SIGMOBILE Distinguished Service Award, given to recognize an individual who has made exceptional contributions to ACM SIGMOBILE, its conferences, publications, or its local activities.
- The SIGMOBILE RockStar Award, recognizes an individual who has made recent outstanding research, or product, contributions to the field of mobile computing during the early part of his, or her, career.
- Best paper awards are given at all five of our sponsored conferences and presented each year.
- Support for students at SIGMOBILE conferences and workshops, through reduced registration fees, student travel awards for some conferences (with NSF support), and student poster sessions.
- The SIGMOBILE web site, including a wealth of information for the community such as complete information on SIGMOBILE conferences and workshops, a Ph.D. thesis collection, paper formatting instructions for authors, reviewer guidelines, and a feedback questionnaire.
- SIGMOBILE also provides financial support for mobile networking community programs such as CRAWDAD (Community Resource for Archiving Wireless Data At Dartmouth) and N² Women (Networking Networking Women).

SIGMOBILE Awards

The SIGMOBILE Best Paper Awards are given to the authors of the best paper from among all papers submitted to the conference that year. Typically the conference Technical Program Committee forms the Selection Committee for this award.

At **MobiSys 2012**, the Best Paper Award was given to "ACE: Exploiting Correlation for Energy-Efficient and Continuous Context Sensing" By Suman Nath from Microsoft Research"

At **MobiCom 2011**, the Best Paper Award was presented for two papers: 1) "*E-MiLi: Energy-Minimizing Idle Listening in Wireless Networks*", Xinyu Zhang (University of Michigan-Ann Arbor,

USA) and Kang G. Shin (University of Michigan-Ann Arbor, USA); 2) “*Detecting Driver Phone Use Leveraging Car Speakers*”, Jie Yang (Stevens Institute of Technology, USA), Simon Sdhom (Stevens Institute of Technology, USA), Gayathri Chandrasekaran (Rutgers University, USA), Tam Vu (Stevens Institute of Technology, USA), Hongbo Liu (Stevens Institute of Technology, USA), Nicolae Cekan (Rutgers University, USA), Yingying Chen (Stevens Institute of Technology, USA), Marco Gruteser (Rutgers University, USA), and Richard P. Martin (Rutgers University, USA)

At **MobiHoc 2011**, the Best Paper Award was given to “*EM-MAC: A Dynamic Multichannel Energy-Efficient MAC Protocol for Wireless Sensor Networks*”, Lei Tang (Rice University), Yanjun Sun (Texas Instruments), Omer Gurewitz (Ben Gurion University), and David B. Johnson (Rice University).

At **MobiHoc 2012**, the Best Paper Award was presented to: “*Serendipity: Enabling Remote Computing among Intermittently Connected Mobile Devices*”, Cong Shi, Vasileios Lakafosis, Mostafa Ammar, and Ellen Zegura (Georgia Institute of Technology).

At **SenSys 2011**, the Best Paper Award went to “*Aveksha: A Hardware-Software Approach for Non-intrusive Tracing and Profiling of Wireless Embedded Systems*”, by Matthew Tancreti, Mohammad Sajjad Hossain, Saurabh Bagchi, and Vijay Raghunathan (Purdue University).

At **Ubicomp 2011**, the Best Paper Award was given to two papers: 1) “*Nurturing Natural Sensors*”, by Stacey Kuznetsov, William Odom, James Pierce, Eric Paulos; and “*Haptic Reassurance in the Pitch Black for an Immersive Theatre Experience*”, by Janet van der Linden, Yvonne Rogers, Maria Oshodi, Adam Spiers, David McGoran, Rafael Cronin, Paul O’Dowd.

This year SIGMOBILE did not award the OCA, however a candidate has been chosen for the year 2012/13, and will be announced at MobiCom Sept 2012 in Istanbul, Turkey.

ACM Student Research Competition (SRC)

Held at MobiCom 2011, organized by Prof. Bechir Hamdaoui (Oregon State University), and sponsored by Microsoft in collaboration with SIGMOBILE; the following awards were presented to graduates for their research:

Gold (Score: 157): “*AirTrack: Locating Non-WiFi Interferers using Commodity WiFi Hardware*” by Ashish Patro, Shravan Rayanchu, and Suman Banerjee (University of Wisconsin Madison)

Silver (score: 133): “*HAWK: An Unmanned Mini Helicopter-based Aerial Wireless Kit for Search, Rescue and Surveillance*”, Zhongli Liu, Yinjie Chen, Benyuan Liu and Xinwen Fu (University of Massachusetts Lowell).

Bronze (score: 125): “*A Robust Technique for WLAN Device-free Passive Motion Detection*”, Ahmed E. Kosba (Alexandria University, Egypt), Ahmed Saeed (Egypt-Japan Univ. of Sc. and Tech., Egypt) and Moustafa Youssef (Egypt-Japan Univ. of Sc. and Tech., Egypt).

SIGMOBILE in the News

Throughout the year some of our SIGMOBILE publications have been reported in news articles. The list below captures the references the executive committee is aware of, but it may not be comprehensive:

UbiComp 2011

- **“Taxicab data helps ease Traffic”, Sept 29th, 2011 by John Roach**
http://futureoftech.msnbc.msn.com/_news/2011/09/29/8038525-taxicab-data-helps-ease-traffic

MobiCom 2011

- **“Smartphone battery life improves with new invention”, Sept 16th 2011 by Ysolt Usigan**
http://www.cbsnews.com/8301-501465_162-20107301-501465.html
- **“Rutgers engineers design cell phone app to reduce distracted driving” July 30th, 2012 by Carl Blesch.**
<http://phys.org/news/2012-07-rutgers-cell-app-distracted.html>

HotMobile 2012

- **‘Ghost Hunter’ game lures players to take pictures for researchers”, March 18th, 2012.**
http://www.msnbc.msn.com/id/46776567/ns/technology_and_science-innovation/t/ghost-hunter-game-lures-players-take-pictures-researchers/
- **“2 HotMobile papers that grabbed us: WalkSafe and SpinLoc”, March 20th 2012, Bob Brown**
<http://www.networkworld.com/news/2012/032012-hotmobile-papers-257489.html>

MobiSys 2012

- **“No Sleep energy bugs’ drain smartphone batteries”, June 13, 2012,**
<http://www.purdue.edu/newsroom/research/2012/120613HuSmartphoneBugs.html>
- **“Purdue researchers add ‘wakelock’ cleanup to phone power research” 13th June 2012 by Richard Chirgwin.**
http://www.theregister.co.uk/2012/06/13/fixing_android_no_sleep_bug/
- **“New software bugs drain smartphone batteries while not in use”, 14 June 2012, by ANI**
<http://in.news.yahoo.com/software-bugs-drain-smartphone-batteries-while-not-055409397.html>
- **“Future-Predicting Phones Will Speed Up App Launches”, June 27th, 2012 by Jamie Condliffe.**
<http://gizmodo.com/5921644/future+predicting-phones-will-speed-up-app-launches>
- **“Future-predicting system cuts app loading time”, 27th June 2012 by Paul Marks**
<http://www.newscientist.com/article/mg21428703.800-futurepredicting-system-cuts-app-loading-time.html>
- **“Mixed Signals: Smart Phone Sensors Recruited to Deliver Indoor GPS” July 2, 2012, By Larry Greenemeier.** <http://www.scientificamerican.com/article.cfm?id=smart-phone-indoor-gps>
- **“NQ Mobile(TM) Scientists Reveal Ground-Breaking New Malware Detection Method” 27th June, 2012, PR Newswire –Asia.** <http://betanews.com/newswire/2012/06/27/nq-mobiletm-scientists-reveal-ground-breaking-new-malware-detection-method/>
- **“Looking for the Elevator? There’s an App for that”, June 28th, 2012.**
<http://middleeast.tmcnet.com/news/2012/06/28/6403192.htm>
- **“Need directions indoors? Soon you’ll be able to ask your phone”, 1st July 2012, by Kerstin Nordstrom.** <http://www.newsobserver.com/2012/07/01/2172599/need-directions-indoors-soon-youll.html>

MobiCom 2012 (ahead of the August 22nd Conference)

- **“Flickering lights help smartphones keep time” , 26 July 2012 by Jacob Aron**
<http://www.newscientist.com/article/mg21528745.500-flickering-lights-help-smartphones-keep-time.html>

- **“Fluorescent lights keep smartphones from ten-second drifts”, July 28, 2012 by Nancy Owano.** <http://phys.org/news/2012-07-fluorescent-smartphones-ten-second-drifts.html>

Executive Committee Planning

Pervasive Computing Conference

As reported last year, we had been investigating adding the independent ‘Pervasive’ conference to our existing five sponsored conferences. As it happens, the newly formed Joint Steering Committee (JSC) for the Pervasive and the Ubicomp conferences decided to merge these two events in 2013. Going forward there will be only one ACM Conference under the name ‘Ubicomp’, and sponsored jointly by SIGMOBILE and SIGCHI; the discussion presented last year is now moot.

In the future, we may consider approaching the now long running MobileHCI conference as an annual ACM SIGMOBILE sponsored event.

SIGMOBILE Workshop Coordinator

We have not replaced our previous SIGMOBILE Workshop Coordinator, Ahmed Helmy (University of Florida, Gainesville, USA), a task we reported on our to-do list last year. This is mainly because it is a role that the conference general chairs perform with advice from their steering committee. We have not found it necessary to find a replacement, and unless one arises, may decide not to continue this position.

Sponsorship for the Mobile Computing Research Community

SIGMOBILE is required to keep a contingency fund balance in case one of our sponsored conferences suffers a loss. In recent years, the fund balance is now above what is required by the SIG Governing Board, and we can consider using some of these monies to support the mobile computing research community. At MobiSys 2012 we had an impromptu SIGMOBILE meeting to discuss some of options. In the Fall of 2012, we are likely to set up an advisory committee to make informed recommendations to the SIGMOBILE Executive Committee. Initial suggestions for supporting the mobile research community include:

- Student conference sponsorships (especially for developing countries).
- Research benchmark archive
- Community software: buy CAD/tools/software licenses for use by the research community.
- ACM project programmer: shared between SIGMOBILE, SIGOPS, SIGCOMM
- Floating Research Assistant
- Award for best PhD
- Honorariums for Industry Leaders to provide instructional interviews for MC2R.

Summary

Mobile computing is one of the fastest growing subfields within computer science, and as a result SIGMOBILE continues to be a strong, successful, well-supported organization. Membership is stable, and the SIG’s conferences and workshops are well attended, creating a wealth of publications for the ACM digital library, and its members. Moreover, our financial situation has strengthened further in 2012, a trend for 4 years now, providing the organization with flexibility and options to support additional high-value programs for the research community in the future.

SIGMOD FY'12 ANNUAL REPORT
July 2011 – June 2012
Submitted by: Yannis Ioannidis, Chair

Mission

ACM SIGMOD (Special Interest Group on Management of Data) is concerned with the principles, techniques, and applications of database management systems and data management technology:

“The goal of SIGMOD is to be the premier international community for innovative dissemination of knowledge concerning the management of data, broadly defined, including the aspects of data description, storage, querying, analysis, security, and privacy.”

Main Conferences and Newsletter

SIGMOD/PODS Conferences — These continue to be very successful and highly regarded events that bring together theoreticians & experimentalists presenting high-quality research and other results. In 2012 the conferences were held in Scottsdale, Arizona and approached record numbers (coming only behind the 2007 event in Beijing, China). The conferences' value was enhanced by about a dozen co-located and SIGMOD sponsored workshops, including a very well attended Ph.D. symposium, organized for the first time.

The executive committee of SIGMOD includes a Conference Coordinator who provides continuity in the organization of the conferences from year-to-year. During the reporting period, Dr. Sihem Amer-Yahia (Qatar Computing Research Institute) has served as Conference Coordinator. Unfortunately, she has recently asked to be replaced, so there will be a new colleague serving in this role soon.

SIGMOD Record — SIGMOD Record continues to be a high-quality quarterly newsletter and its coverage has been growing. Over the past years, several columns were added (influential papers, database principles, systems and prototypes, and standards). Dr. Ioana Manolescu (INRIA) is SIGMOD Record editor and heads a sizable team of associate editors.

Awards

SIGMOD sponsors several awards each year that recognize excellence in the database community. In 2012, these awards were given to the following researchers:

SIGMOD Edgar F. Codd Innovations Award: Bruce Lindsay (IBM Research)

SIGMOD Contributions Award: Marianne Winslett (University of Illinois – Urbana-Champaign)

SIGMOD Jim Gray Doctoral Dissertation Award: “Scalable Storage Managers for the Multicore Era”, F. Ryan Johnson (CMU)

SIGMOD Test-of-Time Award: “Executing SQL over Encrypted Data in the Database-Service-Provider Model”, Hakan Hacigumus, Bala Iyer, Chen Li, and Sharad Mehrotra (University of California – Irvine)

SIGMOD 2012 Best Paper Award: “High-Performance Complex Event Processing over XML Streams”, Barzan Mozafari, Kai Zeng, and Carlo Zaniolo (UCLA)

PODS Alberto O. Mendelzon Test-of-Time Award: “Containment and Equivalence for an XPath Fragment”, Gerome Miklau (University of Massachusetts – Amherst), Dan Suciu (University of Washington)

PODS 2012 Best Paper Award: “Worst-case Optimal Join Algorithms”, Hung Q. Ngo (University of Buffalo), Ely Porat (Bar-Ilan University), Christopher Re (University of Wisconsin), and Atri Rudra (University of Buffalo)

Electronic Information

As of early 2011, the SIG website and all physical information products outlined below are managed by our new Information Director, Prof. Curtis Dyreson (Utah State University), and a team of several Associate Information Directors.

SIGMOD Online — Our website (<http://www.sigmod.org/>) provides access to a wealth of content, including the proceedings of SIGMOD/PODS and other co-sponsored conferences, the newsletter issues, Anthology and DiSC metadata, and videos of interviews of distinguished database researchers. There is currently a plan to modify the site structure to increase its usefulness, readability, and searchability.

SIGMOD Blog — During the reporting period we started the official blog site for SIGMOD (<http://wp.sigmod.org>). Its purpose is to catch the heartbeat of our community on exciting and controversial topics that are of interest to the community, and facilitate discussions among researchers on such topics. Blogs by notable researchers and teachers in the database community are posted every month and have covered topics ranging from Big Data to new publication models for computer science.

SIGMOD Social Media Presence — In addition to the blog, we have also started using social media to inform and build the database community. SIGMOD has a ~~facebook~~Facebook group with 187 members and a Google+ circle. Furthermore, twitter accounts were set up during the 2012 SIGMOD/PODS Conferences with general and specific (per paper) hashtags, for participants to discuss in general about the conferences or in detail about a paper, respectively.

DBJobs — This year we have revived dbjobs (<http://www.dbjobs.org>), a searchable collection of database jobs offered as a free service to the database community by SIGMOD. It is intended for use by job seekers that have a background in databases. Job postings are moderated, so they are guaranteed to be database-related. Job postings are automatically scraped and pulled in from DBWorld and other resources, so job seekers need only check dbjobs.

SIGMOD Anthology — This is a collection of 6 volumes (CD/DVD) that contain over 130,000 digitized pages of database research literature, covering all historical SIGMOD-related research content that has been available to us. The Anthology effort has achieved its purpose with the publication of Volume 6, and no future volumes are anticipated.

SIGMOD Digital Symposium Collection (DiSC) — This is an annual DVD publication containing the proceedings for that year for several conferences and newsletters, as well as video of some conference sessions. DiSC11 shipped during the reporting period. As we have evolved towards a situation where almost all content on the DiSC DVDs is available online to SIGMOD members, no plan exists to ship DiSC in the future.

Membership

The SIGMOD membership levels and fees have remained unchanged this past year. Professional membership is mainly distinguished between *online* (whose benefits include among others conference registration discounts and web access to significant content, e.g., quarterly SIGMOD Record issues and Anthology & DiSC metadata linking to the ACM DL) and *print* (which includes the additional benefit of print copies of the SIGMOD Record issues). The Member Plus option additionally offers CD/DVD copies of SIGMOD/PODS conference proceedings, DiSC, and the Anthology. Finally, student membership is at the cost of online-professional but has the benefits of the Member Plus option.

SIGMOD is the sixth largest SIG overall. Still, our membership has exhibited a slightly decreasing trend over the last several years, so we are working to identify ways to reverse the current trend. Our efforts are in the directions of (a) introducing new superior benefits or refining and improving

existing ones and (b) engaging in community mobilization activities and other initiatives. Students as well as researchers in developing countries are important target groups in these efforts. To help our work regarding item (a), we have distributed questionnaires during SIGMOD/PODS 2012 and have received useful input for some critical issues that may be important to conference attendees (most of whom are SIGMOD members).

Initiatives

Online DiSC — Following the successful completion of the Anthology and DiSC initiatives, we have started investigating the possibility of offering (as much as possible of) the DiSC content online. When this is achieved, we will also simplify the membership structure by dropping the Member Plus option.

Experiment repeatability — After its launch in the 2008 SIGMOD conference, the program of evaluating the “repeatability” of experimental results reported in SIGMOD papers entered a trial period during which authors of accepted papers are extended the option of having the experimental aspects of their work validated by a separate SIGMOD-sponsored experimental program committee. This is de-coupled from the conference reviewing, both in terms of the program committees and timelines. Validated papers are listed in a SIGMOD Record article and can make reference to this, as an incentive for authors to participate in this effort to improve the standards of experimentation in the database field. The trial has been quite successful and participation has been stable in terms of number of submissions through the years. The community has learned several lessons from this activity, including the fact that we are still far from the vision of “executable papers”. The initiative will soon be thoroughly evaluated and the results of this activity will determine its future.

Undergraduate and Graduate Scholarship Program — As part of its educational mission, SIGMOD continued its subsidy of eight undergraduate students from various institutions around the world to attend the 2012 SIGMOD/PODS conferences and present posters on their research work. It did the same for a large number of graduate students who might otherwise not have been able to attend. In particular, a total of 76 students have been directly supported by SIGMOD to attend the 2012 SIGMOD/PODS Conference. In addition to SIGMOD’s own funds, a \$20,000 student travel grant from NSF helped support part of the costs for some of the students.

Traveling Speakers Program and Database Summer Schools — Both are in collaboration with VLDB and are under development. The former will organize multi-day visits to major campuses in a chosen country by a pair of senior database researchers while the latter will promote education in databases in developing countries.

Other — SIGMOD has several additional ongoing or new initiatives that benefit the database community. These include support for DBLP (<http://www.informatik.uni-trier.de/~ley/db/>), a book donation program from SIGMOD/PODS attendees to research institutions in needy countries, and the PubZone non-profit discussion forum for publications in the database community (in cooperation with ETH Zurich).

Collaborations and Collaborative Activities

SIGMOD was one of the SIGs sponsoring the ACM A.M. Turing Centenary Celebration. The SIGMOD Chair was a member of the organizing committee of the event and seven student members of the SIG received financial support to attend the meeting. There is a plan for the students to write their impressions in a short paper/report for SIGMOD Record.

We continue to be in close collaboration with our sister societies, such as VLDB Endowment, IEEE TCDE, EDBT Association, and ICDT Council. Especially with VLDB, we have a series of joint

activities, i.e., the Summer Schools and the Traveling Speakers Program, the inclusion of VLDB material in the ACM DL, the Digital Library Donation Program (contributes SIGMOD Anthology Silver Edition DVDs to research institutions in needy countries), and others. We are also carefully observing the PVLDB journal initiative, where VLDB conference presentations are associated with PVLDB journal papers published during the preceding year and are not chosen by a special program committee.

We are also cooperating closely with several other ACM SIGs on various activities, primarily conference co-sponsorship. Examples, include SIGKDD for the KDD Conference, SIGSOFT for the Distributed Event-Based Systems Conference (DEBS), and SIGKDD, SIGIR, and SIGWEB for the Web Search and Data Mining Conference (WSDM). A recent example is our collaboration with SIGOPS for the Symposium on Cloud Computing (SOCC), where the both SIGs were instrumental in creating what promises to become an important annual conference. SOCC was held for the first time in 2010, co-located with SIGMOD/PODS, and for the second time in 2011, co-located with SOSOP. Both times it was very successful in terms of program quality (32 accepted papers in the second event) and attendance. During the reporting period, it was decided that the conference should have an independent life and should not be tied to the locations and timings of SIGMOD/PODS and SOSOP. Thus, plans have been made in this direction and SOCC will be held for the third time in San Jose, CA this fall.

Finances

SIGMOD is a thriving, very active SIG with healthy finances in spite of the economic downturn. This is largely thanks to the efforts of our corporate-sponsorship chairs of the last few years, who have been able to secure sponsorship funds for the SIGMOD conference in excess of \$150,000 on the average annually (and sometimes over \$200,000), ensuring profitability of the individual conferences as well as financial security of the SIG overall. Given this balance, as mentioned above, we have subsidized student registrations heavily during SIGMOD/PODS 2012 and provided a substantial number of travel grants to undergraduate and, primarily, graduate students, enabling them to attend the SIGMOD/PODS conferences. We intend to continue or even expand this level of support for travel grants, scholarships, and special programs as long as our finances permit it.

Current Status and Future Outlook

SIGMOD continues to be a thriving, healthy, and very active SIG. There are certainly areas where it can improve even further, but we feel that SIGMOD is a strong organization and have every expectation of it continuing to provide useful benefits to its members, and thereby, continuing to grow.

SIGOPS FY'12 ANNUAL REPORT
July 2011 – June 2012
Submitted by: Jeanna Matthews, Chair

Overview

SIGOPS is a vibrant community of people with interests in “operating systems” in the broadest sense, including topics such as distributed computing, storage systems, security, concurrency, middleware, mobility, virtualization, networking, cloud computing, datacenter software, and Internet services. We sponsor a number of top conferences, provide travel grants to students, present yearly awards, disseminate information to members electronically, and collaborate with other SIGs on important programs for computing professionals.

Notable activities from the past year include:

- New officers began their two-year terms in July 2011 (Jeanna Matthews as Chair, George Candea as Vice Chair, and Dilma da Silva as Treasurer). The past officers (Doug Terry as Chair, Frank Belloso as Vice Chair and Jeanna Matthews as Treasurer) completed their 4 years of service on June 30. Muli Ben-Yehuda accepted the position of SIGOPS Information Director, taking over for Stefan Saroiu who served for 4 years.
- Planning for the next *ACM Symposium on Operating Systems (SOSP)*, which is scheduled for November 3-6 2013 in Farmington, Pennsylvania, are well underway. Michael Kaminsky (Intel) is serving as the General Chair, and Michael Dahlin (University of Texas) is serving as the Program Chair.
- The second *SIGOPS Asia-Pacific Workshop on Systems (APSys)* was held on July 11-12 2011 in Shanghai, China and the third instance of this workshop is being held in Seoul, South Korea, in July 2012.
- The first *ASPLOS Influential Paper Award* was awarded at ASPLOS 2011. This award is sponsored in cooperation with SIGARCH and SIGPLAN.
- SIGOPS has been actively involved in lobbying for changes to the ACM copyright policies. Yannis Ioannidis (SIGMOD) and Jeanna Matthews (SIGOPS) attended the ACM Publications Board meeting in June 2012 proposing that authors retain copyright and grant to ACM a non-exclusive license to publish. A number of people influential in the SIGOPS community provided detailed input into the process including John Wilkes, Tom Anderson, Frans Kaashoek and Mike Freedman.
- SIGOPS has made progress on a list of guidelines for approving requests for in-cooperation status.

Awards

SIGOPS presents several awards on a yearly basis.

Miguel Castro received the Mark Weiser Award at SOSP 2011 for creativity and innovation in operating systems research.

The 2011 Edsger W. Dijkstra Prize in Distributed Computing, co-sponsored by SIGOPS, was awarded to Hagit Attiya, Amotz Bar-Noy, and Danny Dolev for their paper “Sharing Memory Robustly in Message-Passing Systems” in *Journal of the ACM (JACM)* 42(1):124-142 (1995). Starting in 2011, ASPLOS began awarding an “Influential Paper Award,” modeled after a similar award presented at ISCA. The ASPLOS Influential Paper Award can be awarded to any paper published in ASPLOS conferences ten or more conferences prior to the conference in which the award is being made. The first ASPLOS Influential Paper Award was made to the paper “The 801 Minicomputer,” by George Radin, which appeared in the first ASPLOS conference in 1982.

The 2011 SIGOPS Hall of Fame Awards, which recognize the most influential systems papers, were presented at SOSP 2011 for the following papers:

- Jim Gray. Why Do Computers Stop And What Can Be Done About It? HP Labs Technical Report TR-85.7.
- Ken Thompson. Reflections on Trusting Trust. Communications of the ACM, Volume 27 Issue 8, Aug 1984.
- Jack B. Dennis, Earl C. Van Horn. Programming Semantics for Multiprogrammed Computations. Communications of the ACM, Volume 9 Issue 3, March 1966.
- David A. Patterson, Garth Gibson, Randy H. Katz. A Case for Redundant Arrays of Inexpensive Disks (RAID). Proceedings of the 1988 ACM SIGMOD International Conference on Management of Data.

Programs and Services

Professional SIGOPS membership dues remain at \$15, and student membership is just \$5 per year. We offer a “member plus” package (for \$20) for those who wish to receive proceedings for the ASPLOS, Eurosys, and SOSP conferences. For the “member plus” package proceedings will be sent in the format produced for the conference itself. As conferences move away from printed proceedings altogether, printed proceedings may no longer be produced exclusively for the “member plus” recipients. This package is deliberately priced at lower than the cost of a single printed proceedings to allow for this evolution. If or when all three of the conferences in the “member plus” package choose not to produce printed proceedings, we will discontinue this option entirely. ACM is experimenting with a print-on-demand option for proceedings (approximately \$75 per proceedings depending on length).

Several widely respected conferences were sponsored or co-sponsored by SIGOPS this year. This includes the *EuroSys Conference* (with our European SIGOPS Chapter), the *International Conference on Architectural Support for Programming Languages and Operating Systems* (ASPLOS), co-sponsored with SIGARCH and SIGPLAN, the *Symposium on Principles of Distributed Computing* (PODC), co-sponsored with SIGACT, the *International Conference on Embedded Networked Sensor Systems* (SenSys), co-sponsored with SIGARCH, SIGBED, SIGCOMM, SIGMETRICS and SIGMOBILE, the *International Conference on Virtual Execution Environments* (VEE), co-sponsored with SIGPLAN, the *International Conference on Mobile Systems, Applications, and Services* (MobiSys), co-sponsored with SIGMOBILE, and the new *Symposium on Cloud Computing* (SOCC), co-sponsored with SIGMOD and collocated with SOSP. Additionally, the *Asia-Pacific Workshop on Systems* (APSys) has become a yearly event with the long-term goal of highlighting and supporting systems research in the Asia-Pacific region. SIGOPS encourages participation in conferences and career building activities for young members of the community. For example, substantial funding was provided this year as travel grants for students to attend conferences and diversity workshops, with many of these grants targeted at women and underrepresented minorities.

SIGOPS also publishes a quarterly newsletter, *Operating Systems Review*, which focuses on specific research topics or research institutions, manages an electronic mailing list, which is used for announcements, and maintains a web site: <http://www.sigops.org/>. Thomas Bressoud joined Jeanna Matthews as a co-editor of OSR in 2011. He had been serving as associate editor since 2008. John Chandy, Ashvin Goel and Antônio Augusto Fröhlich continue to serve on the OSR Individual Submission Committee with John Chandy as chair.

Key Issues

SIGOPS is actively considering whether to continue producing printed proceedings and distributing the OSR newsletter in printed form. Strong arguments can be made for going completely “green”, i.e. paperless. SOSP 2011 had no printed proceedings, but did have a CD with proceedings. However, papers were still produced in two formats to support both the printed proceedings package and the digital versions. We suspect that SOSP 2013 will be the first SIGOPS sponsored venue to have purely online proceedings.

SIGOPS is focusing on increasing its membership in parts of the world beyond the U. S. and Europe. The establishment of the APSys workshop was one important step in this direction.

Another potential step is the creation of new chapters, following the success of the SIGOPS European Chapter (EuroSys). However, questions remain to be sorted out concerning the scope of new chapters e.g. what financial arrangements should exist between local chapters and SIGOPS. During the SIGOPS Business Meeting at SOSP 2011, we discussed the ACM Copyright model. A vote at that meeting indicated strong desire for authors to retain copyright. This was a definite escalation of sentiment since the 2009 Business Meeting where members wanted to see ACM be more willing to grant exceptions – e.g. allowing authors to distribute their papers along with releases of open source software. In response to this growing discontent with the ACM copyright model among SIGOPS members, some of the SIGOPS officers and prominent SIGOPS members have been lobbying ACM to change their copyright model. John Wilkes, Tom Anderson, Frans Kaashoek and Mike Freedman provided input to Bernard Rous, ACM Director of Publications. Jeanna Matthews (SIGOPS) and Yannis Ioannidis (SIGMOD) were invited to attend the ACM Publications Board meeting in June 2012 for a detailed discussion of these issues. Based on this discussion, the Pubs Board will be making recommendations for change to the ACM SIG Governance Board in October. They are expected to recommend a change to an exclusive license vs. copyright model and that in addition they will offer options for SIGs and/or authors to make their papers open access. SIGOPS is concerned that the changes will not go far enough and made it clear that changing from copyright transfer to an exclusive license model does not truly address the concerns being raised, but are hopeful that SIG and author options for making papers open access might be a step in the right direction. We are anxious to see the detailed proposals including specific cost models for these SIG and author options.

SIGPLAN FY'12 ANNUAL REPORT
July 2011 – June 2012
Submitted by: Phil Wadler, Chair

Overview

SIGPLAN is flourishing. Our two flagship conferences have expanded to double tracks, and this year saw record-breaking conferences in Japan and China. Downloads from the Digital Library are up, and money handed out for travel via PAC has increased tenfold in nine years. We hand out a growing portfolio of awards, adding the Programming Language Software Award in 2010 and the Robin Milner Young Research Award in 2012.

Conferences

Conferences are the lifeblood of SIGPLAN. This year's conferences have seen a spectacular upturn in attendance, bettering previous highs by 107, 108, and 212.

ICFP leapt from a previous high of 242, a tie between Freiburg in 2007 and Edinburgh in 2009, to 349 in Tokyo in 2011. Congratulations to general chairs Manuel Chakravarty and Zhenjiang Hu and program chair Olivier Danvy. Plans are apace for this September in Copenhagen.

PLDI rose from a previous high of 430 in San Jose in 2011, where it was part of ACM's Federated Computing Research Conference, to 538 in Beijing, where it was colocated with LCTES, ECOOP, and ISMM. Congratulation to general chair Jan Vitek and program chair Frank Tip. We look forward to next June in Seattle.

And POPL bounded from a previous high of 324 in Austin in 2011 to 536 in Philadelphia in 2012. Congratulations to general chair John Field and program chair Michael Hicks. The rise was in part due to 148 students attracted to the Programming Languages Mentoring Workshop, organised by Kathleen Fisher, Ronald Garcia, and Stephanie Weirich. Total unique registrations for all events during the week hit 653. Celebrations are in the offing for the 40th anniversary of POPL next January in Rome.

Awards

SIGPLAN made the following awards in FY 2012.

SIGPLAN Programming Languages Achievement Award:
Matthias Felleisen.
The award includes a cash prize of \$5,000.
Announced at PLDI 2012, presented at ICFP 2012.

SIGPLAN Distinguished Service Award:
Jens Palsberg.
The award includes a cash prize of \$2,500.
Presented at PLDI 2012.

SIGPLAN Programming Languages Software Award:
Jikes Research Virtual Machine (RVM).
The award includes a cash prize of \$2,500.
This is the second year this award was given.
Presented at PLDI 2012.

SIGPLAN Robin Milner Young Researcher Award:

Shriram Krishnamurthi.

The award includes a cash prize of \$2,500.

Announced at PLDI 2012.

This is the first year the award was given.

SIGPLAN Outstanding Doctoral Dissertation Award:

Dan Marino, U. California Los Angeles;

his advisor was Todd Millstein.

The award includes a cash prize of \$1,000.

Presented at PLDI 2012.

Most Influential Paper of ICFP 2001:

Claudio Russo for

"Recursive Structures for Standard ML".

The award includes a cash prize of \$1,000.

Presented at ICFP 2010.

Most Influential Paper of OOPSLA 2001:

Grzegorz Czajkowski and Laurent Daynes for

"Multitasking without compromise: a virtual machine evolution".

The award includes a cash prize of \$1,000.

Presented at OOPSLA 2010.

Most Influential Paper of POPL 2002:

George C. Necula, Scott McPeak, and Westley Weimer for

"CCured: type-safe retrofitting of legacy code".

The award includes a cash prize of \$1,000.

Presented at POPL 2012.

Most Influential Paper of PLDI 2002:

Cormac Flanagan, K. Rustan M. Leino, Mark Lillibridge, Greg Nelson, James B. Saxe,

Raymie Stata for

Extended Static Checking for Java

The award includes a cash prize of \$1,000.

Presented at PLDI 2011.

2011 John Vlissides Award:

Hari Pyla, Virginia Tech.

The award includes a cash prize of \$2,000.

Presented at OOPSLA 2011.

This year SIGPLAN inaugurates a new award in honour of Robin Milner (1934--2010), one of the founders of our field. The Robin Milner Young Researcher Award recognises outstanding contributions by young investigators in the area of programming languages. Individuals whose computer-related professional career (graduate school or full-time employment, whichever began first) started no earlier than January 1st of the year that is 20 years prior to the time of nomination are eligible. The award includes a prize of \$2,500.

Information about SIGPLAN awards, including citations for all the awards above, is available from:

<http://www.sigplan.org/Awards/Main>

Research Highlights

The SIGPLAN Research Highlights Nominating Committee, chaired by Ben Zorn, nominates papers appearing in SIGPLAN conferences to the Communications of the ACM to appear in their Research Highlight track. Ten papers were nominated in the last year. As of January 2011, out of 23 papers that the SIGPLAN CACM Research Highlights Committee has nominated, 7 have now appeared in the CACM.

Information on SIGPLAN Research Highlights, including details of all nominated papers, is available from:

<http://www.sigplan.org/Newsletters/CACM/Main>

Professional Activities Committee

The Professional Activities Committee (PAC) offers funding for students to attend conferences and workshops, and to support professionals that require help for childcare or because they are not able-bodied. Only SIGPLAN members are eligible for PAC funding. The PAC budget has grown from \$10K in 2003 to \$100K in 2012, with NSF supplying additional funding targeted on supporting US students to attend PLDI and POPL. Applications are increasing as more people become aware of the existence of PAC.

The SIGPLAN Executive Committee decided to grow PAC funding so it roughly matches our income from the ACM Digital Library. (SIGPLAN receives a fraction of the funds paid for subscription to the Digital Library, proportional to the number of downloads of articles from SIGPLAN conferences.) This has, so far, enabled us to fund most but not all applications to PAC, and we are keeping a close eye on the situation for the future.

Open meeting

The SIGPLAN Executive Committee reported on the state of SIGPLAN at the annual open meeting at PLDI in Beijing on Monday 11 June 2012, graciously hosted by Microsoft Research at Microsoft's Beijing Office.

The open meeting was combined with a demofest organised by Microsoft; this did not work so well, as the open meeting was in conflict with demofest presentations. For future years, PLDI organisers should be alerted early to the need to organise a separate business meeting.

For the second year running, this year's meeting was conducted as a poster session followed by a short open discussion. The format was well received, and I recommend its use for future. The posters for the open meeting are available on the web:

<http://www.sigplan.org/Resources/OMP>

Anti-Harassment Policy

Cristina Lopes, general chair of SPLASH 2011, drove the introduction of a new SIGPLAN anti-harassment policy. Cristina worked with myself and the executive committee to refine the policy, which the executive committee then approved. I am sad to say the policy was motivated by some unfortunate incidents in the past, but I am happy to see SIGPLAN provides a framework on which our members can construct a policy for a better future. Information on the policy is available from:

<http://www.sigplan.org/Resources/Policies/Anti-harassment>

Online vs. Print

SIGPLAN offers two categories of membership, online and print. Online members pay reduced registration for conferences, are eligible for PAC support, receive online access to SIGPLAN publications for the year, and are posted an annual CD containing all SIGPLAN publications during the year to ensure continued access. Print members in addition receive a postal subscription to SIGPLAN Notices.

For many years, the cost of publishing and posting SIGPLAN Notices significantly exceeded the charge for print membership, leading to an annual deficit. Two years ago, the SIGPLAN EC voted to increase the charge for print membership by \$65, so the charge would cover the costs. However, the costs of print have continued to rise, as SIGPLAN Notices has moved from thinner issues of articles to thicker issues containing conference proceedings. Further, there is increasing pressure from conferences and workshops to be reprinted in SIGPLAN Notices, in part because SIGPLAN Notices is indexed by Thompson Reuters, and some bureaucracies only count publications entered in such indexes.

The cost of printing and postage is now a further \$95 more than what we charge. Passing on an increase of that size on top of the preceding increase seems unfair, not least because the indexing issue shows that print proceedings add value for all our members, not just those that subscribe to print. Instead, the executive committee decided to increase the charge for print by a modest \$20. Currently, our conferences bring in substantial income, because a portion of the budget is allocated to contingency but usually not spent. Income from conference contingency covers the additional print costs, so we will not run at deficit.

Online rates remain the same. With the print increase, the rates are:

Professional online membership:	\$25/year
Student online membership:	\$15/year
Print membership:	\$130/year

We also offer the option to receive print proceedings of POPL, PLDI, ICFP, and SPLASH for \$16 each, though the take up of this option is low.

We expect print charges to continue to rise moderately. Meanwhile, ACM is working with Scopus and Thompson Reuters to include conferences in the appropriate indexes. Once that happens, the pressure to include proceedings in SIGPLAN Notices may decrease, and we may reconsider our policy. The executive committee will continue to monitor the situation.

Single- vs. Double-Blind

Most conferences use submissions that are single-blind: authors do not know the identities of referees. For many years, PLDI has used submissions that are double-blind: referees also do not know the identities of authors. In recent years, this policy has evolved to 'light' double-blind, where referees do not know the identity of authors when writing their first review, but the identity is revealed before referees make their final decision. In 2012, POPL joined PLDI in using light double-blind, but POPL 2013 will revert to single-blind.

The motivation for using double-blind is to avoid gender, institution, or other factors from unconsciously prejudicing reviews. The motivation for using light double-blind is that sometimes the identity of authors is relevant, for instance if the author of the paper at hand was also the author of a related preceding work. However, light double-blind carries with it the risk of reintroducing biases double-blind was intended to alleviate.

We now have several years worth of data on single-blind, double-blind, and light double-blind reviews. Social scientists can mine this data, and determine whether there are significant differences in bias exhibited depending on the blindness of the reviews. SIGPLAN is teaming up with social scientists who have experience in this area to perform such a study. Let's do some science!

Conferences vs. Journals

The conferences-vs.-journals debate continues to rage. Some suggest that conferences have become de facto journals, and we should label them as such. Others believe the conference review process is of necessity rough-and-ready, and likely to admit more mistakes than the iterative journal review process. If conferences are to become the cornerstone of our science, we need to refine their review process to be less prone to error.

At this year's POPL, the steering committee reached consensus on a two-stage, more journal-like review process, based on similar plans adopted by ICLP (the International Conference on Logic Programming) and VLDB (the Very Large Data Bases conference). Both now have an iterative review process, with two stages of review. The first phase of review behaves as currently; a number of papers are then selected for a second iteration of revision and review. The extra burden on the PC and on authors would be modest; the review cycle would be lengthened by one month; the quality of decisions and the quality of final papers would be improved.

The SIGPLAN chair presented this proposal to POPL attendees at a business meeting the day after the steering committee met, and it was clear the proposal does not enjoy consensus from the POPL community as a whole. So back to the drawing board! Currently, a proposal is under consideration to allow papers accepted by TOPLAS to be presented at PLDI. Decisions will involve consultation with the community.

Continuing as currently appears to lead to a future where conferences completely replace journals, but that seems undesirable. The ACM Publications Board appears to hope we will spontaneously revert to a past where researchers routinely followed conference publications with journal versions, but that seems unlikely. We need as a community to find an evolutionary path that combines the best of conferences and journals.

Mentoring Workshop

To encourage senior undergraduate and beginning graduate students to pursue research careers in the theory of programming languages, SIGPLAN sponsored the Programming Languages Mentoring Workshop (PLMW). The workshop was organised by Kathleen Fisher, Ronald Garcia, and Stephanie Weirhci, and took place the day before POPL 2012. Thanks to generous sponsorship, 148 people registered for the workshop, making the event standing-room only. The content of the workshop included a mix of mentoring talks on how to thrive as a researcher and technical talks surveying a portion of the field. The website for the workshop is publicly available and includes the slides from all speakers:

<http://www.cis.upenn.edu/~sweirich/plmw12/>

A follow-on workshop is being organised for 2012 by Nate Foster and Philippa Gardner.

NSF Coordination

SIGPLAN is working with NSF to ensure the appointment of Program Directors knowledgeable about programming languages. Dan Grossman and Kathleen Fisher run an informal e-mail group to encourage discussion of how the community can increase its engagement with NSF.

As a result of this activity, NSF appointed two members of the programming language community, Bill Pugh part-time in Spring 2011, and John Reppy to begin a rotation in August 2011. The e-mail group continues.

Computing Curriculum

Roughly once a decade, ACM and IEEE-CS revise a document describing the content and objectives of an undergraduate computer-science degree. Though not a formal specification or standard, the document has wide influence on curricula, courses, textbooks, etc., and serves as a useful guide for many constituencies. SIGPLAN members expressed significant displeasure with the treatment of content related to programming languages in the 2001 document as well as the "interim revision" in 2008. The 2008 committee decided that resolving the "programming languages issue" required too much change for an interim revision, leaving it for the 2013 effort.

The 2013 effort is led by a 17-person steering committee appointed by ACM and IEEE-CS. SIGPLAN Executive Committee members Kathleen Fisher and Dan Grossman were appointed. The committee has worked diligently since December 2010, including monthly conference calls and, as of Spring 2012, three in-person two-day meetings.

"Programming Languages" is one of eighteen "Knowledge Areas" that together form the "Body of Knowledge" that describes the topics covered (either as requirements or electives) in an undergraduate computer-science program. Each Knowledge Area was written or revised by a subcommittee including steering-committee members and others.

For Programming Languages, the subcommittee was the SIGPLAN Education Board, plus Kathleen Fisher and Ernesto Cuadros-Vargas from the steering committee. The subcommittee was led by Dan Grossman and included Kim Bruce, Curt Clifton, Kathi Fisler, Kathleen Fisher, Steve Freund, Matthew Hertz, Johan Jeuring, Doug Lea, Simon Thompson, and Ernesto Cuadros-Vargas. The subcommittee received external feedback from Alex Aiken, Ron Cytron, Tony Hosking, James Noble, Jens Palsberg, Michael Scott, and Michelle Strout.

Further details are available from:

<http://wp.acm.org/sigplanelducationboard/>

The revised curriculum is available at:

<http://cs2013.org/>

Summer School

SIGPLAN sponsors the Oregon Summer School in Programming Languages. Further details of the 2011 school are available from:

<http://www.cs.uoregon.edu/Research/summerschool/summer11/>

Key issues for next 2-3 years

The relation between conferences and journals has become a subject of increased discussion across ACM, including within SIGPLAN. We must continue the discussion. One possible line is to follow hiPEAC/TACO, VLDB/pVLDB, and ICLP/TPLP in integrating journals with conferences.

SPLASH continues to undergo teething troubles, as it seeks to maintain its status as a venue where academics and industry meet. Some structural adjustments may be required as SPLASH expands, to maintain smooth relations between its key components, OOPSLA and Onward!.

As noted previously, we will need to continue to closely monitor the balance between online and print memberships, attempting to meet the needs of both constituencies. We must support our new information director, Andy Gill, as he looks to upgrade SIGPLAN's web presence to include blogs and other social media.

SIGPLAN's education committee is well placed to influence the new ACM curriculum, and this will be one of the most important areas of action for SIGPLAN in the coming year.

SIGPLAN membership stood at 12,000 in 1990, at 4,000 in 2000, and a bit over 2,000 currently. The web has replaced the role once played by SIGPLAN Notices, undermining what had been a compelling reason to become a member of SIGPLAN. Although SIGPLAN continues to run a strong conference program, it appears that many attend our conferences without joining SIGPLAN--is this a concern?

SIGSAC FY'12 Annual Report
July 2011- June 2012
Submitted by: Elisa Bertino, Chair

1. SIGSAC CONFERENCES AND WORKSHOPS

SIGSAC's mission is to develop the information security profession by sponsoring high quality research conferences and workshops. SIGSAC's first sponsored event was the ACM Conference on Computer and Communications Security (CCS) in 1993. Since then, it has been held twice in Fairfax, Virginia (1993, 1994), and once each in New Delhi, India (1996), Zurich, Switzerland (1997), San Francisco (1998), Singapore (1999), Athens, Greece (2000) and Philadelphia (2001). In the period 2002-2008, CCS was held in the Washington, DC metropolitan area (i.e., in Alexandria, VA). In 2009, 2010, and 2011 CCS was held in Chicago; these editions saw a major increase in attendance (with CCS 2011 having more than 540 attendees). The 2011 edition of CCS featured, in addition to the research paper program, a successful poster and demo program. The 2012 edition of CCS will be to Raleigh (NC) and the 2013 edition will be in Berlin (Germany). The selection of the location of the CCS 2014 edition is currently underway and a decision will be reached by the middle of August 2012.

From its inception, CCS has established itself as among the very best research conferences in security. This reputation continues to grow and is reflected in the high quality and prestige of the program. In 2011, the CCS acceptance rate was 14% (i.e., 60 papers accepted from 429 submitted). Undoubtedly, CCS remains one of the most competitive conferences in the area. As in previous years, the program of CCS includes several co-located workshops. We expect that the CCS submission rate and attendance to remain high in future years.

Starting in 2001, SIGSAC launched a second major annual conference called the ACM Symposium on Access Control Models and Technologies (SACMAT). The first three meetings were held in Chantilly, Virginia; Monterey, California; and Como, Italy. From 2002, SACMAT meetings have been co-located with the IEEE International Workshop on Policies for Distributed Systems and Networks. The 2006 SACMAT was held in Lake Tahoe, California, in 2007 in Nice – Sophia Antipolis, France, in 2008 in Estes Park, Colorado, in 2009 in Stresa, Italy, in 2010 in Pittsburgh, Pennsylvania, in 2011 in Innsbruck, Austria. The 2012 edition of the symposium was held in Newark, New Jersey USA, on June 20-22 and attracted 73 submissions of which 19 were accepted for presentation at the conference (a 26% acceptance rate). SACMAT 2012 also included, for the first time in the SACMAT series, a demo session, featuring several interesting demos. Next year, SACMAT will be held in Amsterdam, The Netherlands.

In 2012, SIGSAC held the seventh instance of its third major conference, namely ACM Symposium on Information, Computer and Communications Security (AsiaCCS), in Seoul, Korea, on May 02-04, 2012. The first AsiaCCS was held in Taipei, Taiwan, on March 21-23, 2006, the second was held in Singapore on March 22-24, 2007, the third in Tokyo, Japan, on March 18-20, 2008, the fourth in Sydney, Australia, on March 10-12, 2009, the fifth in Beijing, China, on April 13-16, 2010, the sixth in Honk Kong, on March 22-24, 2011. The 2012 edition of the conference received 159 submissions and accepted 35 regular papers and 14 short papers yielding an acceptance rate of 30% and 22% for full papers. The increased number of submissions suggests that there is a sustained interest in the information security area outside North America. Next year, ASIACCS will be held in Hangzhou, China, in May 2012.

The Wireless Network Security Conference (WISEC) was started in Alexandria, Virginia, on March 31-April 2, 2008. This conference merged two successful ACM workshops, namely WiSec (held in conjunction with Mobicom) and SASN (held in conjunction with CCS) in the US, and a successful European workshop (ESAS) held in conjunction with ESORICS in Europe. In 2009, WISEC was held in Zurich, Switzerland. In 2010 the conference was held in Hoboken, New Jersey, on March 22-24, 2010. In 2012 the conference was held in Hamburg, Germany, on June 14-17, 2011. This year the conference was held Tucson, Arizona, USA on April 16-18.

Starting this year the conference has been renamed Conference on Security and Privacy in Wireless and Mobile Networks (WiSec). This year, the conference received 63 submissions. Of these, 17 submissions were chosen for presentation as full papers. The conference also had a poster track for which 7 posters were accepted. The location of this conference alternates between US and Europe. Next year the conference will be held in Budapest, Hungary, on April 17-19, 2012.

SIGSAC launched its fifth major conference in February 2011. This new conference focuses data and applications security and privacy. It has been motivated by the fact that with rapid global penetration of the Internet and smart phones and the resulting productivity and social gains, the world is becoming increasingly dependent on its cyber infrastructure. Criminals, spies and predators of all kinds have learnt to exploit this landscape much quicker than defenders have advanced in their technologies. Security and Privacy has become an essential concern of applications and systems throughout their lifecycle. Security concerns have rapidly moved up the software stack as the Internet and web have matured. The security, privacy, functionality, cost and usability tradeoffs necessary in any practical system can only be effectively achieved at the data and application layers. This new conference provides a dedicated venue for high-quality research in this arena, and seeks to foster a community with this focus in cyber security. The inaugural edition of the new annual ACM Conference on Data and Applications Security and Privacy (CODASPY 2011) was held **February 21-23, 2011 in Hilton Palacio Del Rio, San Antonio, Texas**. Professor Ravi Sandhu from the University of Texas at San Antonio served as general chair and Professor Elisa Bertino from Purdue University served as program chair. The conference received 69 submissions. Of these, 21 were selected for presentation, with an acceptance rate of 30%. The conference also included three keynote talks, three industry and application invited presentations, and a panel on "Research Agenda for Data and Application Security". The second edition of CODASPY has also been held in San Antonio, Texas, in February 2012. This edition received 113 submissions, which is significant increase with respect to the previous year's count of 69. The program committee selected 21 regular research papers and 10 short papers. The program was complemented by a keynote address and a panel focusing on grand challenges in data and application security. The 2013 edition of CODASPY will also be held in San Antonio, Texas, in February 2013 and will be expanded to include posters.

2. SIGSAC PUBLICATION INITIATIVES

ACM Transactions on Information and Systems Security (TISSEC) remains our major journal venue for research publications. We do not expect to sponsor another journal for the foreseeable future.

3. SIGSAC SPECIAL PROJECTS

The establishment of the SIGSAC Doctoral Dissertation Award for Outstanding PhD Thesis in Computer and Information Security has been completed; this project started in 2010. This annual award by SIGSAC will recognize excellent research by doctoral candidates in the field of computer and information security. The SIGSAC Doctoral Dissertation Award winner and up to two runners-up will be recognized at the ACM CCS conference. The award winner will receive a plaque, a \$1,500 honorarium and a complimentary registration to the current year's ACM CCS Conference. The runners-up each will receive a plaque. The award will be assigned starting from 2013.

4. AWARDS

The two SIGSAC awards started in 2005. The 2005 Outstanding Innovation Award was given to Dr. Whitfield Diffie of SUN Microsystems, and the Outstanding Contribution Award was given to Dr. Peter G. Neumann of SRI International. In 2006, the Outstanding Innovation Award was

given to Dr. Michael Schroeder of Microsoft Research and the Outstanding Contribution Award was given to Dr. Eugene Spafford of Purdue University. The 2007 Outstanding Innovation Award was given to Dr. Martin Abadi of the University of California, Santa Cruz (and Microsoft Research) and the Outstanding Contribution Award was given to Professor Sushil Jajodia of George Mason University. The 2008 Outstanding Innovation Award was given to Professor Dorothy Denning of Naval Postgraduate School and the Outstanding Contribution Award was given to Professor Ravi Sandhu of the University of Texas at San Antonio. The 2009 Outstanding Innovation Award was given to Dr. Jonathan Millen of The MITRE Corporation, and the Outstanding Contribution Award was given to Dr. Carl Landwehr of the University of Maryland. The 2010 Outstanding Innovation Award was given to Dr. Jan Camenisch of IBM Research, Zurich, and the Outstanding Contribution Award was given to Professor Bhavani Thuraisingham of The University of Texas at Dallas. The 2011 Outstanding Innovation Award was given to Professor Virgil Gligor of Carnegie Mellon and the Outstanding Contribution Award was given to Professor Ravishankar Iyer of The University of Illinois at Urbana-Champaign.

5. ACM DIGITAL LIBRARY

The ACM Digital Library has become an important source of revenue for all SIGs. With the addition of several workshop proceedings, SIGSAC received a healthy share of the total revenue. SIGSAC will seek new ways to add to the library's content (such as collecting speakers' slides and videos of conference invited talks, tutorials, and paper presentations) to strengthen and broaden its appeal to all subscribers.

6. ELECTIONS AND EXECUTIVE COMMITTEE

Following the elections held in 2009, the following officers started their terms on July 1, 2009: Professor Elisa Bertino of Purdue University (Chair), Professor Vijay Atluri of Rutgers University (Vice-Chair), and Professor Peng Ning of North Carolina University (Treasurer).

According to the bylaws of SIGSAC, the executive committee starting from July 2009 consists of the elected officers and the previous SIGSAC Chair, Professor Virgil Gligor of CMU. The chair of the executive committee is Professor Elisa Bertino.

The officers were granted an extension of their terms and will serve until June 2013.

7. POLICIES

SIGSAC has put in place a new policy concerning simultaneous submissions of manuscripts to conferences, symposia, and workshops sponsored by SIGSAC. Under this new policy (posted at the SIGSAC web site: <http://www.sigsac.org/submissions.html>), the authors of manuscripts violating the simultaneous submission policy will be banned for two years from submitting manuscripts to any conference, symposium and workshop sponsored by SIGSAC.

8. SUMMARY

SIGSAC is in excellent shape both in terms of successful technical activities and financially. We expect that, in the coming years, SIGSAC will continue to sustain and build on existing activities.

SIGSAM FY'12 Annual Report
July 2011- June 2012
Submitted by: Jeremy Johnson, Chair

SIGSAM Communications in Computer Algebra

The Communications in Computer Algebra has been published since 1965 (previously SICSAM Bulletin and SIGSAM Bulletin). The CCA is published quarterly; however, only two double-issues are printed and mailed per year, with the four electronic issues appearing through the digital library and the SIGSAM website. The change to two rather than four printing was made to prevent delays and save money and is consistent with the wishes of many of our members.

Manuel Kauers (Austria) and Ilias S. Kotsireas (Canada) served as co-editors, with an editorial board consisting of Chris Brown (USA), Jean-Guillaume Dumas (France), Massimo Caboara (Italy), Laureano Gonzalez-Vega (Spain), Michael Wester (USA), Lihong Zhi (China), Eugene Zima (Canada). Four issues were published in the period covered by this report (issues 177-180) with two printed copies. The CCA continued with a mix of refereed papers, conference and workshop poster abstracts (including ISSAC and ECCAD), dissertation abstracts and announcements of interest to the computer algebra community.

Conference and Event Sponsorship

ISSAC. The International Symposium for Symbolic and Algebraic Computation (ISSAC) for 2012 (37th annual conference) was held July 22-25, 2012 at the University of Grenoble, in Grenoble, France. ISSAC 2012 was sponsored by INRIA, in cooperation with ACM SIGSAM. The proceedings were published by ACM Press and conference discounts were available to ACM and SIGSAM members. ISSAC 2013 will be held June 27-29 in Boston. It is expected that the organizers will seek ACM sponsorship.

SIGSAM reserves a portion of its funds (referred to as the *ISSAC contingency fund*, and tracked by the SIGSAM treasurer to support the ISSAC conference series. The level of this *contingency fund* is currently USD 9,248. Given the excess ISSAC funds, it is hoped that the ACM/SIGSAM fee for the next ISSAC conference in Boston can be reduced to 10%, as was the case for INRIA sponsorship of this year's ISSAC conference. This reduction, along with a switch to on demand publication of the printed version of the proceedings, would be passed on to SIGSAM members and the general computer algebra community through a reduced conference registration fee. Such an arrangement would go a long way towards maintaining ACM/SIGSAM sponsorship for ISSAC.

The location for ISSAC 2014 was selected by vote at the ISSAC 2012 business meeting and will be held in Kobe, Japan. It is anticipated that it will be sponsored by an organization in Japan and will seek ACM sponsorship.

ECCAD. SIGSAM sponsored the East Coast Computer Algebra Day (ECCAD'12), in cooperation with ACM, on May 12, 2012, at Oakland University in Oakland MI. Poster abstracts from ECCAD'12 were published in the CCA issue 180.

Awards

SIGSAM sponsors prizes in computer algebra and nominates our best researchers for top-level awards and prizes.

ISSAC Awards. SIGSAM sponsors the ISSAC Distinguished Paper and Distinguished Student Author prizes. This is from an endowment with a value of USD 54,742.4 as of June 30, 2012.

- The ISSAC 2012 Distinguished Paper award was given to Akos Seress for his paper "Construction of 2-Closed M-Representations".
- The ISSAC 2012 Distinguished Student Author Award was given to Wei Zhou in recognition of his paper "Computing Minimal Nullspace Bases," co-authored with George Labahn and Arne Storjohann, and to Romain Lebreton in recognition of his paper "Algorithms for the Universal Decomposition Algebra," co-authored with Éric Schost.

Jenks Memorial Prize. SIGSAM also sponsors and administers the ACM SIGSAM Richard Dimick Jenks Memorial Prize for Excellence in Software Engineering applied to Computer Algebra. The

prize is given in alternating years and was not awarded this year. This award is granted from an endowment with a value of USD 29,454 as of June 30, 2012.

Transactions on Mathematical Software

SIGSAM has a seat on the editorial board of the ACM Transactions on Mathematical Software (TOMS). This position was previously held by Gene Cooperman of Northeastern University (USA). Michael Monagan from Simon Fraser University (Canada) has taken over this position.

Viability Review

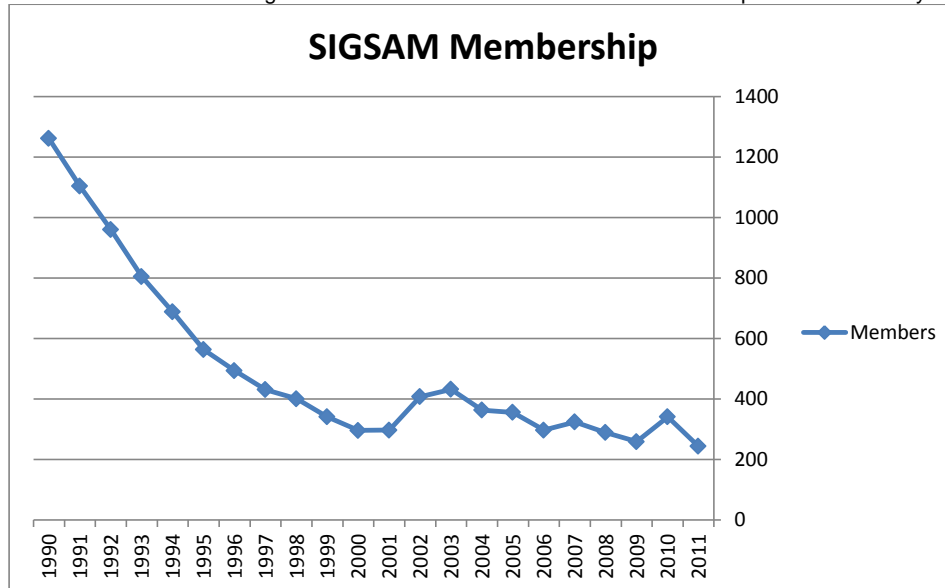
At the SIG Board meeting on March 27, 2009, SIGSAM was found to be viable and given a renewal for the standard four-year period. For the previous two renewals, SIGSAM had only been given two-year renewals. SIGSAM will be preparing for its viability review in 2013. A large part of this will be to review membership benefits and come up with a plan to increase membership and community engagement.

SIGSAM Elections

The current ACM/SIGSAM officers will be completing their second 2 year term at the end of this fiscal year. An election will be held in the upcoming year to determine the new officers. Mark Giesbrecht, former chair of SIGSAM, will serve as chair of the nominating committee.

SIGSAM Membership

As of June 30, 2012, SIGSAM had 241 members, which dropped from 251 members the previous year. While membership has leveled off from the significant drop (from 346) the previous year, the current drop continues a general downward trend in membership and remains the primary concern for SIGSAM. The following chart shows the decline in SIGSAM membership over the last 21 years.



The SIGSAM officers have started to investigate this trend along with a review of member benefits, and will determine a plan going forward to raise membership.

SIGSAM Advisory Board

The Advisory Board advises the Chair on matters of interest to SIGSAM. It consists of the officers, the Past Chair, the newsletter Editor(s) and up to ten Members at Large elected by ballot by the members of SIGSAM at the Annual General Meeting. The advisory board has not been active in the last four years and the SIGSAM officers will look at how best to use the advisory board and a plan to reactivate the board.

SIGSAM Finances Summary

We inherited a financially robust SIGSAM, with an opening balance of over \$47,000, well above what is minimally required, thanks to the fiscally conservative policies of our previous leaderships. SIGSAM was financially successful during the 3 years between 2009-12. During the 2009-2010 year SIGSAM added around \$3000 to the balance, and during the 2010-11 fiscal year it added around \$100. Due mainly to the success of the ISSAC'11 conference, during the 2011-12 fiscal year SIGSAM is projected to add around \$6000 to the budget. There is a slight loss budgeted for the fiscal year 2012-13, which will be paid from the previous year's surplus.

SIGSIM FY'12 Annual Report
July 2011- June 2012
Submitted by: Drew Hamilton, Past Chair

Awards

- a) An award of the **ACM SIGSIM Distinguished Contributions Award**, which recognizes individuals based on their overall contributions to the field of modeling and simulation, including technical innovations, publications, leadership, teaching, mentoring, and service to the community was not made this year. The recipient of the Award typically receives a plaque and an honorarium of \$1500. Dick Nance reorganized the SIGSIM Awards Committee and the 2011 ACM SIGSIM Distinguished Contributions Award was made to James Wilson of North Carolina State University.
- b) Juan Pablo Saenz Corredor (University of Miami) was awarded the **ACM SIGSIM Best Ph.D. Student Paper Award** at the 2011 Winter Simulation Conference. The recipient of the Award received a plaque and an honorarium of \$200.

Significant papers on new areas that were published in proceedings

SIGSIM sponsored the following two conferences and one workshop.

- Winter Simulation Conference (WSC)
- ACM International Conference on Modeling, Analysis, and Simulation of Wireless and Mobile Systems (MSWiM)
- Workshop on Principles of Advanced and Distributed Simulation (PADS)

WSC, MSWiM, and PADS publish high quality papers in their proceedings. It is infeasible to identify which papers were significant since they all contribute to the state of the art in many different dimensions. Additionally, we continue to expand in cooperation with many other simulation conferences, notably from the Society for Modeling and Simulation and in doing so we increase the size of the simulation holdings in the ACM Digital Library.

Significant programs that provided a springboard for further technical efforts

SIGSIM provided the following benefits to its members:

- a) SIGSIM-members-only access to ACM SIGSIM M&S Knowledge Repository
- b) Proceedings (CD) of the annual Winter Simulation Conference (WSC) mailed to each SIGSIM member
- c) Proceedings (hard copy) of the annual International Workshop on Principles of Advanced and Distributed Simulation (PADS) mailed to each SIGSIM member
- d) Reduced registration fees for many conferences including WSC and PADS
- e) SIGSIM members are granted full on-line access to the proceedings of the SIGSIM sponsored / supported conferences in the ACM Digital Library

SIGSIM provided the following benefits to its community:

- a) Distinguished Contributions Award
- b) Ph.D. Colloquium and Poster Session at the annual WSC
- c) Best Ph.D. Student Paper Award at the annual WSC
- d) Sponsorship of annual conferences: WSC, PADS, and MSWiM
- e) In-cooperation support of many conferences including: DEVS, DS-RT, EOMAS, MASCOTS, MSI, SIMUTools, SpringSim, SummerSim and SW
- f) LinkedIn Professional Group named "ACM SIGSIM", which provides professional networking among the Modeling and Simulation (M&S) professionals

- g) Announcements via a moderated email distribution list about events of interest, Calls for Papers, and Calls for Participation.

SIGSIM's benefits delivered to its members and community together with the two conferences and one workshop it has sponsored provide a springboard for further technical efforts. However these conferences and workshops are run outside of ACM. Our plan is to establish a unique SIGSIM conference to give our SIG more of its own identity as well as increasing participation by new members.

Innovative programs which provide service to our technical community

SIGSIM's Modeling and Simulation (M&S) Knowledge Repository (MSKR) at <http://www.acm-sigsim-mskr.org/> has been an innovative program which provided services to the SIGSIM technical community. Osman Balci has done a commendable job keeping this web site current.

A SIGSIM Conference

The first SIGSIM PADS Conference scheduled for summer 2013 is an important milestone for SIGSIM. SIGSIM is a very different SIG in that it is financially viable with no real activities and no membership outreach. WSC and in the past PADS, have been co-sponsored by several other groups and thus SIGSIM tended to get lost in the crowd. Current SIGSIM Vice Chair Margaret Loper will serve as the first SIGSIM PADS conference chair. The difference is this conference will make is that it will serve the SIGSIM membership rather than be a conference that is run outside of ACM. This conference will provide a venue for high quality computer science oriented publications. This conference serves both a community need and the SIGSIM need to provide a viable activity for its members.

Summary of key issues that SIGSIM membership will have to deal with in the next 2-3 years

SIGSIM cannot outsource its responsibility to serve its members. The long term SIGSIM relationship with WSC is important and very financially rewarding for SIGSIM. There is no need to change SIGSIM's relationship with WSC that is healthy and working well. However, WSC will never meet the membership needs of SIGSIM. Our flat membership numbers make that clear. In-Coops and joint sponsorship of non-ACM conferences are positive things, but they cannot build and support membership. Membership in SIGSIM has been flat for some time. A successful SIGSIM PADS annual conference can help change this membership trend for the better. Participation in ACM SIGSIM should not be limited to a non-ACM conference conducted during the Fall Final Exam week at many universities. A successful SIGSIM PADS conference will change this status quo for the better.

SIGSOFT FY '12 Annual Report
July 2011-June 2012
Submitted by David S. Rosenblum, Chair

SIGSOFT had another excellent year, both technically and financially in 2011-12. This report provides a summary of key SIGSOFT activities over the past year.

AWARDS THAT WERE GIVEN OUT

SIGSOFT has a large awards program that recognizes the many achievements of the software engineering community.

Our prestigious service, research and education awards were presented again this year at ICSE 2012 in Zurich. The ACM SIGSOFT Distinguished Service Award was presented to Alexander L. Wolf (Imperial College London), in recognition of his extensive service to the software engineering community through the many roles he has filled at ACM (including SIGSOFT Vice Chair and Chair, SIG Governing Board Chair, Software Systems Award Chair, ACM Secretary-Treasurer, and ACM Vice President), as well as and his founding of the SEWORLD email list and his service for the leading conferences and archival journals in software engineering (including ICSE 2000 Program Co-Chair and Associate Editor of ACM Transactions on Software Engineering and Methodology and IEEE Transactions on Software Engineering). The ACM SIGSOFT Outstanding Research Award was presented to Lori A. Clarke (University of Massachusetts at Amherst) for her research on many key techniques for software testing and analysis, including pioneering work on symbolic execution for test generation, data flow test adequacy criteria, and data flow analysis for software validation. As is customary for this award, Lori will have the opportunity to deliver a keynote address about her work at FSE 2012 in Cary, North Carolina, USA, in November 2012. Finally, the ACM SIGSOFT Influential Educator Award was presented to two recipients this year. The first recipient was Mehdi Jazayeri (University of Lugano), who is the author of several influential textbooks in software engineering in programming languages, and who designed a highly innovative project-based undergraduate curriculum as Founding Dean of the Faculty of Informatics at the University of Lugano. The second recipient was David Notkin (University of Washington), who has an outstanding record of producing top-quality PhDs, many of whom have become leaders in the software engineering community.

At ICSE we also recognized new ACM Senior Members, ACM Distinguished Members and ACM Fellows for 2010 from the SIGSOFT community. The new ACM Senior Members are Frederico de Sousa Santos (IBM), David Mack Endres (Schlumberger Information Solutions), Aaron Greenhouse (SureLogic, Inc.), Naveed Ikram (International Islamic University, Islamabad), Chang Liu (Ohio University), Andrian Marcus (Wayne State University), Viera Krnanova Proulx (Northeastern University) and Tao Xie (North Carolina State University). Richard E. Pattis (University of California, Irvine) was recognized as a new ACM Distinguished Educator, while Cristina Videira Lopes (University of California, Irvine), David F. Redmiles (University of California, Irvine) and Laurie Ann Williams (North Carolina State University) were recognized as new ACM Distinguished Scientists. Finally, the new ACM Fellows are Thomas J. Ball (Microsoft Research) for contributions to software analysis and defect detection, and Gerard J. Holzmann (NASA JPL) for contributions to software verification by model checking.

The SIGSOFT Impact Paper Award recognizes a paper published in a SIGSOFT conference at least 10 years earlier that has had exceptional impact on research or practice. The 2011 SIGSOFT Impact Paper Award committee, led by William G. Griswold, selected the paper "Interface Automata" by Luca de Alfaro and Thomas A. Henzinger, from the Proceedings of the Joint 8th European Software Engineering Conference and 9th ACM SIGSOFT Symposium on the Foundations of Software Engineering, which was held in Vienna, Austria on 10–14 September 2001. Thomas Henzinger accepted the award at ESEC/FSE 2011 and gave a plenary presentation reflecting on the origins and impact of their paper.

We also presented Retrospective Impact Paper Awards to papers from the first 23 years of SIGSOFT's history of conference sponsorship. Michal Young once again chaired the selection committee, which selected the following four papers:

Dewayne E. Perry and Alexander L. Wolf. "Foundations for the Study of Software Architecture". In ACM SIGSOFT Software Engineering Notes, vol. 17, no. 4, October 1992.

Thomas Reps, Susan Horowitz, Mooly Sagiv and Genevieve Rosay. "Speeding Up Slicing". In Proc. Second ACM SIGSOFT Symposium on Foundations of Software Engineering (New Orleans, December 1994).

David Garlan, Robert Allen and John Ockerbloom. "Architectural Mismatch or Why It's Hard to Build Systems Out of Existing Parts". In Proc. 17th International Conference on Software Engineering (Seattle, April 1995).

Gail C. Murphy, David Notkin and Kevin Sullivan. "Software Reflexion Models: Bridging the Gap between Source and High-Level Models". In Proc. Third ACM SIGSOFT Symposium on Foundations of Software Engineering (Washington, October 1995).

Many of our sponsored meetings this year also presented ACM SIGSOFT Distinguished Paper Awards to the authors of a select number of their accepted papers.

Finally, this year we presented the SIGBED/SIGSOFT Frank Anger Memorial Award to Aldeida Aleti of Swinburne University of Technology. The award supports travel and attendance by a student member of SIGSOFT to a conference sponsored by SIGBED, and Aldeida chose to attend ESWEEK 2011. SIGBED made corresponding awards to Mohamed A. Bamakhrama of Leiden University and Miroslav Pajic of the University of Pennsylvania, who chose to attend ICSE 2012.

SIGNIFICANT PAPERS ON NEW AREAS THAT WERE PUBLISHED IN PROCEEDINGS

The problems and topics addressed in the papers presented at SIGSOFT meetings remain varied and timely. Software engineering researchers are increasing their application of techniques borrowed from other areas of computer science, particularly statistical analysis, data mining and machine learning techniques. One particularly innovative paper applying techniques from outside of software engineering is "On the Naturalness of Software" by Abram Hindle, Earl T. Barr, Zhendong Su, Mark Gabel and Premkumar Devanbu, which was presented at ICSE 2012. The paper applies statistical techniques from natural language processing to analyze the extent to which program code is "natural" (and thus repetitive and predictable) and the extent to which its natural character can be used to support software engineers (such as via automated code completion). Testing and analysis remain the predominant areas of research interest, and researchers are continuing to target more specialized forms of software such as embedded systems, smartphone applications, and software for clouds.

SIGNIFICANT PROGRAMS THAT PROVIDED A SPRINGBOARD FOR FURTHER TECHNICAL EFFORTS

This year we launched a new SIGSOFT Award, the ACM SIGSOFT Outstanding Doctoral Dissertation Award, for outstanding PhD dissertations in the field of software engineering. The effort in creating the award was led by Tao Xie, who with Adam Porter is co-chairing the award selection committee. We expect the first award to be presented at FSE 2012 in November.

Also this year, at ICSE 2012 we continued our support for the ACM Student Research Competition (SRC), which serves to recognize significant achievements of student members of the community and to provide stronger integration of students with professional attendees at our sponsored meetings.

SIGSOFT also was a significant participant and supporter at ACM's Turing celebrations in 2012. Our efforts for this were led by Carlo Ghezzi, Mark Grechanik and Will Tracz.

INNOVATIVE PROGRAMS WHICH PROVIDE SERVICE TO SOME PART OF THE TECHNICAL COMMUNITY

Through the efforts of our History Liaison, Tao Xie, SIGSOFT continues to provide valuable resources to the community documenting the history of our field and the people involved in that history.

We also continued our outreach to the community through our increasing presence in social media outlets, and we have an entry in Wikipedia as well. This year we also chose new hosts for the SEWORLD email list, namely Andre van der Hoek and his group at the University of California, Irvine.

As in past years, we made numerous awards to support travel by PhD students to SIGSOFT-sponsored meetings, under our CAPS Conference Attendance Program for Students (CAPS). We also continued to make CAPS awards to undergraduates and provided awards for childcare support at conferences.

BRIEF SUMMARY OF KEY ISSUES FACING THE SIGSOFT MEMBERSHIP

As in previous years, conference finance remains the key challenge for SIGSOFT, particularly for the volunteers who organize its sponsored meetings, and ultimately for its membership who pay the registration fees for those meetings. Operating and venue costs for conferences continue to soar, and meeting organizers are finding ever more creative ways to keep costs and registration fees down while still providing a rich and rewarding experience for attendees, with the high quality programs, benefits, amenities and activities they have come to expect.

SIGSPATIAL FY'12 Annual Report
July 2011-June 2012
Submitted by: Walid G. Aref, Chair

1. SIGSPATIAL CONFERENCES AND WORKSHOPS

SIGSPATIAL's mission is to address issues related to the acquisition, management, and processing of spatially-related information with a focus on algorithmic, geometric, visual, and systems considerations. The scope includes, but is not limited to, geographic information systems (GIS). These issues have become increasingly important in terms of public awareness with the growing interest and use of online mapping systems such as Microsoft Virtual Earth and Google Maps and Google Earth as well as the integration of GPS into applications and devices such as, but not limited to, the iPhone and Android. Presently, SIGSPATIAL is fulfilling this mission by sponsoring high quality research conferences and workshops. As indicated by its mission, SIGSPATIAL's domain is much more than just geographic information systems and with this in mind it tries to differentiate its conferences and workshop from others by focusing on the computer science aspects of the field rather than on the available commercial products. In addition, a major concern and focus of the SIGSPATIAL leadership is keeping its flagship conference, the ACM SIGSPATIAL International Conference on Advances in Geographic Information Systems (ACM SIGSPATIAL GIS), affordable so that it can continue to be of good value to its attendees and be competitive price-wise with related conferences which are priced at considerably lower levels than most ACM SIG conferences. SIGSPATIAL has been able to achieve this goal by being very active in soliciting sponsor contributions as well as being vigilant at minimizing SIGSPATIAL's financial exposure in terms of contractual obligations when planning the conference by building reserves that can be used in years when the financial climate is not so healthy.

2011 was the fourth year of SIGSPATIAL and its main activity was its flagship conference (ACM SIGSPATIAL GIS) that was held in Chicago, ACM SIGSPATIAL GIS 2010 was the nineteenth event of an annual series of symposia and workshops with the mission to bring together researchers, developers, users, and practitioners carrying out research and development in novel systems based on geo-spatial data and knowledge. The conference fosters interdisciplinary discussions and research in all aspects of spatial systems including but not limited to Geographic Information Systems and Science (GIS) and provides a forum for original research contributions covering all conceptual, design, and implementation aspects of GIS and ranging from applications, user interface considerations, and visualization to storage management, indexing, and algorithmic issues.

This was the fourth time that the conference was held under the auspices of the new ACM Special Interest Group on Spatial Information (SIGSPATIAL). The conference program attracted a record number of 272 attendees (including around 100 student attendees), which is more than 50% increase in the number of attendees when SIGSPATIAL started. The technical program lasted for two and half days, and based on the feedback of the participants, we can conclude that the conference was very successful in terms of new ideas presented and level of interaction provided.

The call for papers led to 200 paper submissions over four tracks: research, industry, PhD showcases, and demos. The research paper track attracted 160 research paper submissions, of which 33 were accepted as full papers, 29 were accepted as poster papers, and 2 were accepted as demo papers. The industry track attracted six submissions, of which one was accepted as a full paper and two as poster papers. The Ph.D. Showcase track received 11 submissions, of which 4 were accepted, while the demonstrations track received 23 submissions, of which 14 were accepted. The submissions were reviewed by a program committee of 126 members. Each paper was reviewed by at least three reviewers, and in most cases four. This resulted in 780 reviews over all paper tracks. These numbers indicate the continued health, interest, and growth of the research field of spatial information systems, and the need to bring its researchers, students, and industrial practitioners together.

The conference program featured two outstanding invited speakers:

1. Harry Shum, Vice President of Microsoft Search, for a talk titled "Bing Dialog Model: Intent, Knowledge and User Interaction"
2. Ben Shneiderman, University of Maryland, for a talk titled "Applying Spatial Data Strategies for Information Visualization".

The conference was run in a single track with one of the highlights being a fast forward poster session in the first afternoon where each poster author was given 2 minutes to present the highlights of their work to the audience. This was followed by a poster and Demo reception in the evening where the conference participants had an opportunity to interact with the poster authors. Poster paper authors were encouraged to do a good job by having two awards: one for best fast forward presentation and one for the actual poster. Demo paper authors were awarded a best demo award for a running prototype that the authors demonstrate. The poster and demo components of the conference proved to be very popular with both the conference audience and the poster and demo authors.

The conference also included a business meeting for SIGSPATIAL which was open to all SIGSPATIAL members as well as to all conference attendees. The meeting included a discussion of budgetary issues, plans for next year's conference, a discussion of some initiatives such as ensuring that the ACM Digital Library has copies of all past issues of the conference proceedings, and soliciting feedback from members.

The conference was preceded by a workshop day with the following eight workshops:

1. SPRINGL 2011: 4th ACM SIGSPATIAL International Workshop on Security and Privacy in GIS and LBS
General Chairs: Elisa Bertino, Maria Luisa Damiani;
Program Committee Chairs: Gabriel Ghinita, Mehmet Emrah Durulan
2. LBSN 2011: 3rd ACM SIGSPATIAL International Workshop on Location-Based Social Networks
General Chairs: Christian S. Jensen, Wang-Chien Lee
Program Committee Chairs: Mohamed F. Mokbel, Yu Zheng
3. IWCTS 2011: 4th ACM SIGSPATIAL International Workshop on Computational Transportation Science
General Chairs: Piyushimita (Vonu) Thakuriah
Program Committee Chairs: Glenn Geers, Steve Liang
4. ISA 2011: 3rd ACM SIGSPATIAL International Workshop on Indoor Spatial Awareness
General Chairs: Lars Kulik
Program Committee Chairs: Ralf Hartmut Güting, Hua Lu.
5. IWGS 2011: 2nd ACM SIGSPATIAL International Workshop on GeoStreaming
General Chairs: Mohamed Ali, Erik Hoel, Farnoush Banaei-Kashani
Program Committee Chairs: Badrish Chandramouli, Conny Junghans, Seyed Jalal Kazemitabar
6. QUeST 2011: 2nd ACM SIGSPATIAL International Workshop on Querying and Mining Uncertain Spatio-Temporal Data
General Chairs: Matthias Renz, Peer Kröger
Program Committee Chairs: Thomas Bernecker
7. SSO 2011: 1st ACM SIGSPATIAL International Workshop on Spatial Semantics and Ontologies
Organizers: Nancy Wiegand, Dalia Varanka, Gary Berg-Cross

8. HPDGIS 2011: 2nd ACM SIGSPATIAL International Workshop on High Performance and Distributed Geographic Information Systems

General Chairs: Shaowen Wang, Nancy Wilkins-Diehr

Program Committee Chairs: Anand Padmanabhan, Xuan Shi, Ranga Raju Vatsavai

The conference was concluded by a three-hour post-conference tutorial session on "Computing with Spatial Trajectories" that was given by: Yu Zheng, John Krumm, Ke Deng, Goce Trajcevski, and Christian S. Jensen.

This year's conference was generously co-sponsored by NSF, ESRI, Google, NAVTEQ, Microsoft, and the McCormick Northwestern University Engineering whose participation and generosity demonstrated what can be accomplished by a successful partnership between academia and industry. The sponsors also contributed to the conference program by participating in a very lively Sponsor Demo session preceding the conference banquet.

The SIGSPATIAL leadership is currently planning for the 2012 ACM SIGSPATIAL GIS Conference that will be held in Redondo Beach, California on November 7-9, 2012 with as many as 12 workshops on November 6.

It has already secured a commitment from NVIDIA to be a sponsor for the spatial data competition that the SIGSPATIAL conference is initiating this year.

SIGSPATIAL has also applied for support from the National Science Foundation (NSF) in the amount of \$30K and plan to use these funds to offer 25-30 travel grants.

Of these funds, we plan to allocate \$20K for the general student participation in the conference and \$10K for the students that participate in a spatial data competition that is to be initiated this year.

SIGSPATIAL also participated in the 4th International Conference on Similarity Search and Applications (SISAP 2011) on June 30 – July 1, 2011, in Lipari, Italy on an in-cooperation basis as it did with the conference in 2009 and 2010.

SIGSPATIAL has also participated in an in-cooperation basis in the 2011 ACM Conference on Ubiquitous Computing (UbiComp '11) that was held in Beijing, China on September 17-21, 2011, and has been approved to continue this in-cooperation status in the 2012 ACM Conference on Ubiquitous Computing (UbiComp '12) that will be held in Pittsburgh, PA in September 5-8, 2012. SIGSPATIAL is also co-sponsoring an in cooperation basis the 2012 International Conference on Connected Vehicles and Expo (ICCVE '12) that will be held in Beijing China in December 12-16, 2012.

2. SIGSPATIAL PUBLICATION INITIATIVES

The ACM Publications Board has approved SIGSPATIAL's request to start the ACM Transactions on Spatial Algorithms and Systems (ACM TSAS) with Hanan Samet as the Editor-in-Chief.

The Editorial Board is currently being formulated and the first Call for Papers is expected to be out by November 2012.

3. AWARDS

In 2011, SIGSPATIAL continued to offer a best paper award, but chose not to make any best student paper awards as virtually all papers had some student authors. The ad hoc 2011 ACM SIGSPATIAL GIS Best Paper Award Committee consisting of Christian Jensen, Egemen Tanin, and Eyal Ofek selected the following paper for the best paper award:

Path Shapes - An Alternative Method for Map Matching and Fully Autonomous Self-Localization
Stefan Funke (University of Stuttgart), Sabine Storandt (University of Stuttgart)

Distinguished Service Award

The SIGSPATIAL Distinguished Service Award recognizes individuals whom the Executive

Committee felt made significant contributions to the success of the SIG. This year, the SIGSPATIAL Distinguished Service Award was made at the banquet of the 2011 conference to:

Prof. Hanan Samet of the University of Maryland in recognition of his tremendous dedication and continuous support as the founder and first chair of SIGSPATIAL.

Awards were also made at the conference by ad hoc committees for the best demo presentation, the best poster paper presentation, and the best fast forward poster paper presentation.

Best Demo Paper Presentation:

Porting a Web-Based Mapping Application to a Smartphone App
Hanan Samet (University of Maryland), Marco Adelfio (University of Maryland),
Brendan Fruin (University of Maryland), Michael Lieberman (University of Maryland),
Benjamin Teitler (University of Maryland)

Best Demo Presentation Runner-up:

mTrend: Discovery of Topic Movements on Geo-Microblogging Messages
Kyoung-Sook Kim (NICT), Ryong Lee (NICT), Koji Zettsu (NICT)

Best Poster Paper Presentation:

Where Traffic Meets DNA: Mobility Mining using Biological Sequence Analysis
Ahmed Jawad (Fraunhofer IAIS), Kristian Kersting (Fraunhofer IAIS), Natalia Andrienko
(FraunhoferIAIS)

Best Poster Presentation Runner-up:

Towards Integrating Real-World Spatiotemporal Data with Social Networks
Huy Pham (University of Southern California), Ling Hu (University of Southern
California), Cyrus Shahabi (University of Southern California)

Best Fast Forward Poster Paper Presentation:

Characterizing Sensor Datasets with Multi-Granular Spatio-Temporal Intervals
Michael McGuire (Towson University), Aryya Gangopadhyay (UMBC), Vandana Janeja (UMBC)

Best Fast Forward Poster Paper Presentation Runner-up:

The Unified Framework for Decentralized Reasoning about Gradual Changes in Topological
Relations
Lin-Jie Guan (University of Melbourne), Matt Duckham (University of Melbourne)

The Paris Kanellakis Theory and Practice Award:

SIGSPATIAL Founding Chair Hanan Samet is being honored by the ACM with the 2011 Paris Kanellakis Theory and Practice Award.

4. ACM DIGITAL LIBRARY

SIGSPATIAL plans to expand its presence in the ACM Digital Library by soliciting workshop proposals both in its role as a sponsor and on an in cooperation status. This can be seen by the increased number of workshops that it sponsored in 2011. These workshops were proposed independently to SIGSPATIAL. In 2011, SIGSPATIAL was more proactive in soliciting workshop proposals and designated its Treasurer, Markus Schneider, as the Workshops Chair. He successfully created a uniform framework for them.

5. SIGSPATIAL CHAPTERS

Fiscal year 2011 saw the growth of two of SIGSPATIAL Chapters: SIGSPATIAL China and SIGSPATIAL Australia with SIGSPATIAL China reaching over 30 members. A new SIGSPATIAL Taiwan Chapter has been initiated and approved.

We have also had inquiries about starting a SIGSPATIAL Korea chapter. These chapters are representative of the amount in interest in SIGSPATIAL from members in these regions and are reflected by their participation in the flagship conference as authors and attendees.

6. PLANS FOR THE 2013 FISCAL YEAR

SIGSPATIAL is working hard to fulfill its mission of sponsoring high quality research conferences and workshops. It will start to be more proactive in soliciting workshops and will also continue to seek out more sponsors and try to devise activities that will increase its attractiveness to the potential sponsors. It will try to continue to maintain, as well as build on, the momentum of its first four years of existence.

7. ELECTIONS and OFFICERS

SIGSPATIAL held its first elections for officers in Spring and Summer 2011.

The elected officers for the three year term running from July 1, 2011 through June 30, 2014 are:

Chair: Walid G. Aref, Purdue University

Vice-Chair: Chang-Tien Lu, Virginia Tech University

Secretary: Divy Agrawal, University of California at Santa Barbara

Treasurer: Mohamed Mokbel, University of Minnesota

According to the SIGSPATIAL bylaws, the past SIGSPATIAL chair is also a member of the EC.

Past Chair: Hanan Samet, University of Maryland

The SIGSPATIAL EC has appointed the following officers:

Newsletter Editor: Andrew Danner, Swarthmore College

Conference Finances Coordinator: Yan Huang, University of North Texas

Conference Venue Coordinator: Shawn Newsam, University of California at Merced

Webmaster, Marco Adelfio: University of Maryland

who are also members of the SIGSPATIAL Executive Committee.

SIGUCCS FY'12 Annual Report
July 2011- June 2012
Submitted by: Kelly Wainwright, Chair

During the past year, SIGUCCS (Special Interest Group for University and College Computing Services) continued its service to the community of professionals who provide computer support at institutions of higher education while also undergoing two significant transitions. For the first time this past fall, the historical Fall Conference and spring Management Symposium were held jointly as part of a SIGUCCS annual conference. Also this year, we transitioned to a new Executive Committee for the SIG.

The Executive Committee members for 2011-2012 (Chair, Kelly Wainwright; Vice Chair/ Conference Liaison, Parrish Nnambi; Secretary, Karen McRitchie; Treasurer, Melissa Bauer; Information Director, Mat Felthousen; and Past Chair Bob Haring-Smith) began their three-year term of office. We also requested applications for our board-appointed positions and, from a competitive field, selected Beth Rugg (Professional Development Coordinator), Trevor Murphy (coordinator of the Communication Awards program), and Nancy Bauer (chair of the Marketing Committee). They each began their roles in January 2012. Other volunteers too numerous to name here individually contribute their energy and ideas to the organization through service on conference and program committees, on the Awards Committee, on the Membership and Marketing Committees, and as judges for the Communication Awards. Many of these individuals are listed in appropriate pages on the SIGUCCS web site (<http://www.siguccs.org>).

Awards and Grants

The SIGUCCS Awards Programs have been in place for more than a decade. The Penny Crane Award for Distinguished Service recognizes significant multiple contributions to SIGUCCS and the profession from individuals over an extended period of time. The Hall of Fame awards recognize selected individuals who have contributed their time and energies to benefit SIGUCCS. For descriptions of the awards programs, please go to: <http://www.siguccs.org/awards/>.

Penny Crane Award for Distinguished Service – Leila Lyons was the recipient of the 2011 Penny Crane Award. For more information please go to: http://www.siguccs.org/awards/penny_crane/leila_lyons.html.

Hall of Fame – Three individuals were inducted into the Hall of Fame in 2011, Timothy Foley, Alex Nagorski and Richard Nelson. See <http://www.siguccs.org/awards/halloffame/halloffame2011.html> for more information.

Conference attendance grants – The SIGUCCS Grant Program provides partial support for individuals in institutions of higher education to participate in the annual SIGUCCS Conference. This support is funded by SIGUCCS and consists of a full registration to the grantee's choice of either the Management Symposium or the Service and Support Conference; registration for one half-day workshop or executive seminar associated with the chosen portion of the conference; and three nights accommodation at the conference hotel. In selecting grant recipients, we favor applicants from institutions that have not been represented at recent SIGUCCS conferences. This approach is intended to make the conferences more widely known and build future attendance.

The program completed its fourth year in 2011-2012. In light of recent budget deficits run by SIGUCCS, the decision was made last year to scale back the program by restricting awards to full-time employees and offering only three grants beginning with SIGUCCS 2011. The three awardees of this grant for the Fall 2011 Conference were:

Lori Duquette, Lambton College
Susan Kerr, Georgia Gwinnett College
Shannon Pretko, Cedar Crest College

On January 1, 2012, Robert Paterson became Chair of the SIGUCCS Awards Selection Committee and Teresa Lockard became Past Chair, following the rotation of the committee's membership as

described at http://www.siguccs.org/awards/awards_committee.html. Two new members, Tim Foley and Richard Nelson, replaced Chris Jones and Dennis Mar, who completed their service to the committee at the end of 2011.

2011 Communications Awards - As we have done for many years, we held our Communications Awards competition in conjunction with our Conference. A description of these awards and the 2011 winners can be found at: <http://www.siguccs.org/Conference/Fall2011/awardwinners.html>. Judging for this competition was led by Greg Hanek who has overseen the Communications Awards competition for several years. Since the 2011 Conference, this role has moved to Trevor Murphy. The Communications Awards Committee is formed each year from the previous year's top award winners in each category.

As can be seen from the listing, there need not be an award made in a category, even if there are submissions. Each year the categories in the competition are reviewed to ensure that they appropriately represent the range of communications currently used in higher education.

Conferences

The first SIGUCCS Annual Conference comprised of the Management Symposium and the Service and Support Conference was held November 12-17, 2011 in San Diego, California, with the theme of "One Team...One Mission." The conferences occurred consecutively giving attendees the opportunity to register for either or both parts of the conference. The keynote speakers were Theresa Rowe of Oakland University for the Management Symposium, Susan Metros of the University of Southern California for the joint plenary that bridged the two conferences, and Gaylene Xanthopoulos of The Leadership Edge, Inc. for the Service and Support Conference. An Executive Seminar on "Emerging Technologies for Engaged Leadership" was held along with three half-day workshops both before and after the Service and Support Conference. For the complete program, see <http://www.siguccs.org/Conference/Fall2011/schedule.html>.

Planning is currently underway for the next annual conference, our second combined conference, which will happen October 14-19, 2012 at the Peabody Hotel in Memphis, Tennessee. For the theme, the conference committee has chosen "IT: All Shook Up" as a launching point for presentations and discussions about the changes occurring in IT in higher education.

As a cost-saving measure and in conjunction with the proliferation of mobile devices, the conference committee has decided to give attendees at the conference the option not to receive a printed program. This selection is happening as part of the registration process.

Webinars

SIGUCCS continued our offering of professional development webinars under the new leadership of Professional Development Coordinator Beth Rugg. We have offered webinars that will help participants better understand the SIGUCCS organization and on topics discussing current issues. Since February of this year we have held six different webinars with an average attendance of 21 people per webinar. Recordings of past webinars are available on the SIGUCCS web site at <http://www.siguccs.org/resources/webinar.html>.

We continue to use GoToMeeting's webinar service, which we also use for board meetings and provides a versatile medium for SIGUCCS services and operations. We use it extensively, not only for webinars and board meetings, but also for committee meetings, pre-conference orientation sessions for first-time attendees at the SIGUCCS Conference, and other on-line volunteer gatherings.

Special Projects

The SIGUCCS Executive Committee and groups of SIGUCCS volunteers have worked on several special projects during the past year.

SIGUCCS Newsletter: A number of years ago, SIGUCCS was a Conference and Newsletter SIG. However, the newsletter was discontinued due to the lack of volunteers to maintain its regular publishing. Recently the SIGUCCS Executive Committee decided that it was time to once again try

this method of communicating with our membership however distributing it electronically rather than in printed form as had been done previously.

With members only having the opportunity to meet once a year for conferences, the newsletter is an attempt to maintain interest in the SIG and connect with our membership between conferences. It will provide a vehicle to communicate SIG benefits, announce upcoming events such as webinars, and inform membership of decisions made by the Executive Committee. The first issue is due to be published August 1, 2012 and a regular publishing schedule will be decided upon at that time.

SIGUCCS 50: SIGUCCS was founded in 1963 and held its first conference in 1973, so 2013 is both the 50th anniversary of SIGUCCS and the 40th anniversary of that first conference. A group led by former SIGUCCS Chairs Leila Lyons and Jack Esbin has been meeting periodically to brainstorm about what form the recognition of these milestones might take. They will also work closely with the SIGUCCS 2013 conference committee so that tight integration with that conference can occur.

It is important to the "SIGUCCS 50" group that the anniversary celebration not be simply an exercise in nostalgia for older members of the SIGUCCS community, but also have clear value for all who rely on SIGUCCS services. Certainly, many of the biggest challenges we face are perennial problems of management, communication, and staff development. Recognizing how the problems persist even as the technology changes may be an important outcome of the SIGUCCS 50 events. Planning for the 50th anniversary recognition is ongoing.

SIGUCCS Mentoring: In looking for ways to expand our professional development opportunities for our membership, SIGUCCS is exploring the establishment of a mentoring program. This program would allow members of the SIGUCCS community to both be mentored and to mentor their colleagues.

Mentors and mentees would both gain from their experience. Mentors, often seasoned professionals, would share their life experiences with their younger colleagues. Mentees would gain by having a professional relationship with someone outside their immediate organizational structure to whom they can turn for ideas, insight and perspective.

SIGUCCS' role in this program will be to match mentors and mentees together, based on completed questionnaires. We will also provide support for those serving as mentors through regular virtual gatherings and by maintaining a list of resources.

SIGUCCS Local Chapter: On March 19, 2012 the first local chapter of SIGUCCS, called "NYCHES Chapter of ACM SIGUCCS", was established, with a Board comprised of Lisa Brown from the University of Rochester (Chair), Laurie Fox from SUNY Geneseo (Vice Chair), and Mike Allington from St. John Fisher College (Secretary/Treasurer). Nearly 40 NYCHES members voted unanimously to establish a SIGUCCS Chapter. The origin of this chapter can be traced back to 1997, when a regional group called NYCHES (New York Computing in Higher Education Symposium) was formed to continue conversations and networking opportunities originated at SIGUCCS conferences. NYCHES representatives have typically been from four-year higher education institutions in western and central New York, and NYCHES has met 2-4 times a year since its formation.

Issues

The economic downturn and its effect on college and university finances continue to be the most important issues that we face. Since, like most SIGs, SIGUCCS depends on its conferences for most of its income, attendance problems at the conferences are quickly translated into financial problems for the SIG. While our attendance numbers for the past two years have evened out, they remain significantly lower than attendance prior to 2009. For this reason, the Executive committee is constantly exploring ways that we can both cut expenses while increasing conference attendance and SIG membership. After a devastating shortfall of \$42,000 for our 2009 conference, we have constantly made improvements and our 2011 conference actually made \$4,000. We are working closely with conference committees to ensure that this trend continues.

The largest change that we have made is having the two conferences run back-to-back, in the same location. This change was made both for programmatic as well as budgetary considerations. We hope that by having the management meeting just prior to the Service and Support Conference, we will encourage teams to attend together, give more incentive to aspiring managers to attend the Management Symposium, and allow for increased crossover in registration between conferences. With a 42 percent increase in attendance at the Management Symposium from the previous year, I believe that we have succeeded in at least some of these goals. In the budget realm, this change allows the SIG to better capitalize on the hotel contract. We are able to have only one food & beverage minimum and hotel block for both conferences. We are also able to decrease volunteer travel costs for pre-conference site visits by having one Conference Chair and one Treasurer for both conferences.

Reduced conference registration also depresses membership in the SIG because the registration discount for members encourages many to join SIGUCCS or to renew their memberships. While there are other reasons to join the SIG, the financial savings loom large. The continuation of webinars as well as the other non-conference member benefits mentioned above will hopefully provide additional motivation for individuals to maintain their SIG memberships.

SIGWEB FY'12 Annual Report
July 2011- June 2012
Submitted by: Simon Harper, Chair

The last year has been an exciting one for SIGWEB. From the sponsorship of the large Web Science Conference, to that of the small Social Network Working Group; from the increase in student travel sponsorship (to \$25,000pa), to our increasing volunteer effort; the SIG has been at work at all levels of our domain.

We have forged links with multiple (approx 20) conferences and workshops across our field, building a better website for our members, changing our bylaws to cement our relationship with our conferences, while still maintaining our low membership dues. In short, it has been an active and productive year.

However, we have faced some challenges too, with a small reduction in membership numbers (to 535). But, we have an increasing funds balance (to \$560,000), and are still increasing the amount we have to spend on each member, from \$590 last year to \$618 this year; with member benefits of: Reduced rates at SIGWEB sponsored, co-sponsored, and co-operating events; Free access to ACM DL content of events sponsored by SIGWEB; Reduced subscription rates to New Review of Hypermedia and Multimedia; Free subscription to the SIGWEB members email list, with calls, advance and final event programs; and news of interest to the community posted regularly; we still have an excellent membership offering.

In short SIGWEB has successfully expanded its range of conference sponsorships, is working hard on membership and volunteer development and benefits, and is financially healthy with a solid leadership.

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SIGWEB represents a unique interdisciplinary research community centred on the technical and human issues that arise from systems of linked information. This idea of explicitly linking pieces of information gave birth to a rich well of research trying to augment the human intellect, a vision articulated by the legendary computing pioneer Douglas Engelbart nearly half a century ago. Engelbart, Ted Nelson, and other early researchers realised this vision through hypermedia systems, which are still of interest to the SIGWEB community today, including the World Wide Web, the largest hypermedia system ever built.

Modern researchers have found a host of other realisations of this vision, ranging from digital libraries to knowledge management systems. SIGWEB includes more than just computer researchers and professionals, though. From cognitive psychologists to ethnographers to anthropologists to hypertext writers, SIGWEB embraces those researchers and practitioners that address how people use computers, so that better tools for augmenting the human intellect can be built. SIGWEB also balances the findings of the research world with the experiences of the practical world, in which our ideas and theories are tested daily.

SIGWEB (originally SIGLINK) was founded 22 years ago to provide a home for the hypertext community and the ACM Hypertext conference. Over the years, SIGWEB has changed its name and has begun to sponsor a wide range of conferences encompassing hypertext, Web science, document engineering, digital libraries, knowledge management and Web search.

1. OFFICERS, EXECUTIVE COMMITTEE, & VOLUNTEERISM

The Elected Officers are:

- ^ Simon Harper (Chair & Hypertext)
- ^ Dick Bulterman (Vice-Chair & CIKM)
- ^ Maria de Graca C. Pimentel (Secretary/Treasurer & DocEng)

This year we changed the bylaws to facilitate better communications between the conferences and the SIG, and to smooth the transition between chairs (by including the past chair as a named member of the executive. The bylaw now states that:

'The Executive Committee comprises the officers, the Information director, the past Chair, and between one and six additional members. The additional members will be active SIG members and may have assigned responsibilities for the SIG, such as representing the SIG on one or more steering committees of each sponsored conference. In general, the intention for the additional members is to ensure that each sponsored conference steering committee has a SIGWEB representative. All appointments of additional members are to be made by the Chair – in consultation with the other officers and the current executive committee.'

This means that the Appointed Executive Committee are:

- ▲ Ethan Munson (Past Chair, DocEng & WebSci)
- ▲ Yeliz Yesilada (Information Director)
- ▲ Jessica Rubart (Newsletter Editor)
- ▲ Bebo White (WebSci)
- ▲ David Hicks (JCDL)
- ▲ Charles Nicholas (CIKM)
- ▲ Peter Brusilovsky (at-Large)
- ▲ Claus Atzenbeck (at-Large)

Volunteer development has historically been a challenge for SIGWEB. However, the elections that were completed last June showed that this is no longer a serious issue. The nominating committee easily found two solid candidates for each of the three offices and elections proceeded smoothly. Further, we have new volunteers handling regular columns in the newsletter, and increasing numbers of people working around the publicity/social media area. We are always on the lookout for newsletter contributors and we are still looking for a Membership Co-ordinator to chase lapsed memberships and promote the SIG into getting more (see later).

2. FY 2012 TECHNICAL MEETINGS AND AWARDS

The technical meetings sponsored by SIGWEB were:

- ▲ ACM Symposium on Document Engineering (DocEng) 2011 - held in September 2011 in Mountain View, CA, USA.
- ▲ ACM Conference on Information and Knowledge Management 2011 - held in October 2011 in Glasgow, UK.
- ▲ ACM International Conference on Web Search and Data Mining (WSDM 2012) - held February 2012 in Seattle, WA, USA.
- ▲ ACM/IEEE Joint Conference on Digital Libraries (JCDL 2012) - held June 2012 in Washington, DC, USA.
- ▲ ACM Conference on Hypertext and Hypermedia (HT 2012) - held June 2012 in Milwaukee, WI, USA.
- ▲ ACM International Web Science Conference (WebSci 2012) - held June 2012 in Evanston, IL, USA.

The awards presented by SIGWEB in FY 2012 were:

- ▲ The Douglas C. Engelbart Best Paper Award for 2012 (HT 2012). Bjoern-Elmar Macek, Christoph Scholz, Martin Atzmueller, Gerd Stumme for 'Anatomy of a conference' - <http://dx.doi.org/10.1145/2309996.2310038>.
- ▲ The Theodor Holm Nelson Newcomer Award for 2012 (HT 2012). Eugenia-Maria Kontopoulou, Maria Predari, Thymios Kostakis, Efstratios Gallopoulos for 'Graph and matrix metrics to analyze ergodic literature for children' - <http://dx.doi.org/10.1145/2309996.2310018>.
- ▲ The Vannevar Bush Award for 2012 (JCDL 2012). Hongbo Deng, Jiawei Han, Michael R. Lyu, and Irwin King for their paper 'Modeling and exploiting heterogeneous bibliographic networks for expertise ranking' - <http://dx.doi.org/10.1145/2232817.2232833>
- ▲ The DocEng Best Paper Award for 2011 (DocEng 2011). Niranjan Damera-Venkata, Jose

Bento and Eamonn O'Brien-Strain for 'Probabilistic Document Model for Automated Document Composition' - <http://dx.doi.org/10.1145/2034691.2034695>.

3. PARTNERSHIPS

SIGWEB shares sponsorship of three conferences: JCDL is co-sponsored with SIGIR and the IEEE TCDL; CIKM is co-sponsored with SIGIR; and WSDM is co-sponsored with SIGIR, SIGKDD, and SIGMOD. Also, while the WebSci conference series is entirely sponsored by SIGWEB, it is governed by a Memorandum of Understanding with the Web Science Trust and its steering committee includes a representative from the International Communications Association.

4. FINANCES

SIGWEB's finances are stable and strong. The SIG's fund balance stands at over \$560,000. This is a \$58,000 increase from the preceding year, and we now have funds which are substantially higher than several years ago. The fund balance is more than adequate to support SIGWEB's planned activities under ACM's formula. Indeed, SIGWEB's conferences have generally been making profits and in some cases have made large profits. However, in the past year some very small losses were made. SIGWEB runs a surplus on its basic operational expenses, largely due to Digital Library income. In the last three years, the SIG has initiated a system of student travel awards, paid out of the operational budget (or the fund balance, depending on your viewpoint) and this substantial new expense has reduced the operational surplus.

5. MEMBERS

In June 2012, SIGWEB had 535 members (416 professional, 41 student, and 75 affiliate). This is about the same as that in June 2011. Previous membership totals were:

June 2012: 535 (Provisional) June 2011: 555 June 2010: 666 June 2009: 699
June 2008: 644 June 2007: 534

Clearly, membership has fallen back to the levels of June 2007. The reasons are not clear. The current best guess is that the SIG has not been as efficient in processing the free memberships given to attendees of 100%-sponsored events as we were in 2008 and 2009.

It is worth mentioning SIGWEB's system of free memberships for conference attendees, because it is a topic of some controversy in ACM SIG circles. Clearly, giving away memberships can increase membership totals. However, the additional members are less 'sticky' because they haven't decided to join on their own. As a result, membership totals can be more variable. SIGWEB chooses to offer free memberships because it appears to us to be a meaningful benefit to our community. Much of SIGWEB's active conference attendance comes from Europe. European academics, in general, are not allowed to pay for society memberships from university funds, even when doing so would reduce the total cost of attending a conference.

One argument is that attending a SIGWEB conference MEANS that attendees are de-facto SIGWEB Members - so let's acknowledge this with a membership; the contrary argument is that we lose direct funding. If no one paid we would lose \$15,000 pa. We are still discussing the ideas of: No conference memberships; memberships free to conference attendees; Additional conference class' (ACM Member Early-Bird + ACM Membership) but this could be dangerous as we may then not get any Non-ACM Members (which make the conference more money); or Attendees, paying Non-Member fees, get the membership included after they have paid.

So, the SIGWEB Exec Comm believes that the SIG can support its natural members by giving them memberships automatically when they attend conferences that only SIGWEB sponsors, but there is still some discussion to be had around how this is accomplished.

6. COMMUNITY

In June 2011, SIGWEB signed a Memorandum of Understanding with the Web Science Trust establishing SIGWEB sponsorship of the International Web Science Conference. The agreement sets up a trial period through 2013. The SIGWEB Exec Comm is very pleased with this expansion of SIGWEB's conference offerings. The WebSci conference is very much in SIGWEB's tradition of interdisciplinary events, since it brings together computer scientists with social scientists and other scholars interested in the Web's impact on society and human life.

In addition, SIGWEB sponsors or co-sponsors the ACM Hypertext Conference (HT), ACM

Symposium on Document Engineering (DocEng), ACM/IEEE Joint Conference on Digital Libraries (JCDL), ACM Conference on Information and Knowledge Management (CIKM), and ACM International Conference on Web Search and Data Mining (WSDM). We also hold in-cooperation and sponsorship agreements and provide other support for several related conferences, symposia, and workshops (including a five year agreement with the Web4All conference). Finally we sponsor or co-sponsor the Douglas C. Engelbart Best Paper Award, Theodore H. Nelson Newcomer Award, Vannevar Bush Best Paper Award, and the SIGWEB DocEng Best Paper Award. By supporting the community, SIGWEB feels it is performing a vital role in encouraging up and coming research areas and agendas which may well be beneficial to both SIGWEB and the wider community in the future. Indeed, we also have a program to confer small grants to new conference and workshop initiatives – the first being the Social Network Working Group.

7. CONCLUSION

SIGWEB has a cross disciplinary (inter disciplinary) stable of conferences. There were some conference losses last year – but these are being more closely scrutinised this year. We see a slightly reduced membership – as no conference memberships have been processed over the last year or so. We see a moderate funds increase. However, we also see the beginnings of an expected bounce back in membership this year. This means that SIGWEB has successfully expanded its range of conference sponsorships. SIGWEB is also working hard on membership and volunteer development. SIGWEB is financially healthy and has solid leadership.

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