**Annual Report of the SIG Governing Board**

**For the period**

**1-July-15 through 30-June-16**

**Submitted by:**

**Patrick Madden**

**September 1, 2016**

1. **The SIG Governing Board (SGB)**

The SGB is comprised of the chief executive officer or designee of each regular SIG. The SGB is charged with forming SIGs, with managing them and setting policies for their management, and with recommending their dissolution. The SGB elects a Chair, Executive Committee and 3 additional representatives to Council.

**The SGB EC**

The SGB elects a Chair and an Executive Committee, which has full authority to act on behalf of the SGB between its meetings. The SGB EC is bound by the SGB’s actions and the SGB may override any decision of the SGB EC. The SGB EC is made up of the following positions which were approved following the review and approval of the restructuring task force recommendations:

**SGB Chair -** Serves as SGB EC Chair, one of the four SIG Representatives on ACM Council, and as the SIG Representative on the ACM Executive Committee. Also responsible for SIG financial and budgetary issues and overseeing SGB committees and task forces.

**SGB EC Vice Chair for Operations** – Presides over SGB and SGB EC Meetings, including SGB EC conference calls. Oversees SIG Liaisons to ACM Committees and Boards.

**SIG Development Advisor** –. Identifies emerging technical areas and works with individuals and groups interested in forming SIGs.

**SGB Conference Advisor** – Oversees developing conference activity to be sponsored by the SGB.

**New SIG Advisor** – Acts as liaison for newly chartered SIGs and helps to nurture and support new SIG leadership as they develop programs and activities.

**SIG Viability Advisor** – Oversees transitional SIGs and works with SIGS scheduled for program reviews. Also acts as the SIG election liaison.

**SIG Awards Advisor -**. Acts as liaison for SIG leaders and Awards Committee and helps SIG leadership with proposals and approval process.

**Publications Advisor** – Acts as liaison between SGB and Publications Board and oversees issues related to publications as directed by the SGB

**SGB** **Past Chair-** Provides guidance and advice to the SGB EC and chairs the SGB EC nominating committee.

**Director of SIG Services** – Staff liaison

**During FY’16 the following individuals held the positions indicated:**

**Name Position Term End**

Patrick Madden Chair July 1, 2016

Erik Altman Past Chair July 1, 2016

Will Tracz SIG Viability Advisor July 1, 2017

Simon Harper SIG Development Advisor July 1, 2017

Charles Clarke New SIG Advisor July 1, 2016

Renee McCauley SGB EC Vice Chair for Operations July 1, 2017

G Scott Owen SGB Conference Advisor July 1, 2016

Donald Kossmann SIG Awards Advisor July 1, 2016

Yannis Ioannidis Publications Advisor January 1, 2017

Donna Cappo Staff Liaison

**Council Representatives**

The SGB elects 3 representatives to the ACM council for two-year terms.

During FY’16 the following individuals held the ACM Council positions indicated:

Name Position Term End

Patrick Madden SGB Chair July 1, 2016

Paul Beame SGB Representative July 1, 2016

Barbara Boucher Owens SGB Representative July 1, 2016

Jeanna Matthews SGB Representative July 1, 2017

**Standing Committees**

The SGB is responsible for the oversight of the Federated Computing Research Conference Steering Committee currently chaired by Rajiv Gupta. Past Chairs Dean Tullsen, Barbara Ryder and Daniel Menasce also serve on this committee.

**Significant SGB actions**

**ACM SIG Structure**

Patrick Madden presented a follow-up on the continuing discussion and efforts to explore ideas on the value of the SIG Structure and to ask key questions. He gave a review for the new SIG Chairs. The ACM leadership sponsored a retreat where they looked at a number of things, the structure of the SIGs being one of them. As a result, a task force was created. The group worked together about a year ago and came up with a draft of a re-rendering of how we define SIGs. There were key questions although this is an ongoing process, with more work to be done.

Madden indicated that an SGB EC task force would be formed to continue this work. It was decided that the SIG structure would remain with 2 differences: viability reviews would now be the responsibility of the SGB EC with reports to the SGB and emerging interests groups would be established.

**Emerging Interest Groups**

The SGB accepted the recommendations of the SIG Structure TF on the establishment of Emerging Interest Groups. Proposals for Emerging Interest Groups will be announced to all SIGs. Emerging Interest Groups will only be established after consultation with related SIGs. Emerging Interest Groups shall be established with a definitive term that is renewable. Operational rules will be established by the SGB EC

**Viability Reviews**

The SGB agreed that change was needed with regard to viability reviews. They voted to allow the SGB EC to make decisions regarding viability and to change the process and base viability on the mission of the SIG with reports on the results presented to the SGB.

**Miscellaneous Appointments**

SIG leaders appointed as committee liaisons:

Name Position Term End

Yannis Ioannidis Publications Board Liaison July 1, 2017

Rajiv Gupta FCRC Steering Comm. Chair July 1, 2019

Tao Xie History Committee Liaison July 1, 2017

Flo Appel USACM Liaison July 1, 2017

Jeanna Matthews USACM Liaison July 1, 2017

Pradip Bose Distinguished Speaker Comm Liaison July 1, 2017

**SGB Nominating Committee**

The SGB Nominating Committee nominates candidates for the SGB EC, in addition to nominating candidates for SGB Chair and SGB Representatives to ACM Council. The nominating committee:

Name Position Term End

Erik Altman Past SGB Chair July 1, 2016

Patrick Madden SGB Chair July 1, 2016

Donna Cappo Staff Liaison

1. **SIG Membership**

Appendix A summarizes basic SIG Statistics for FY’16. Included are member and subscriber totals and conference activities.

**Membership Counts by class of membership:**

 **FY’14 FY’15 FY’16**

ACM/SIG Members 29,234 29,641 26,355

SIG Only Members 9,013 8,672 10,670

Subscribers 780 626 623

Total SIG Memb/Subs 39,027 38,313 37,648

Total ACM Members 109,166 113,046 93,776

The SIGs overall member/subscriber count is 37,648 as compared to 38,313 in FY’15.

1. **SIG Program Reviews and Annual Reports**

Program Reviews and annual reports are the reporting mechanism for individual SIGs to the SGB.

**Program Reviews**

 Every 4 years the SIG Chairs are required to provide a short presentation including a question and answer period during the SIG Chairs meeting. This presentation is intended to show that the SIG is viable and meeting its mission. The endorsement from the SGB to continue the SIG’s status is based on a growing or stable membership, solid finances, healthy conferences, and publications or other member benefits being delivered and well received by members.

The SGB conducted 3 full program reviews during the year. SIGMOBILE and SIGUCCS were deemed viable for 4 years under existing criteria. As a newly chartered SIG, SIGLOG was deemed viable to move out of initial transitional status for a 2 year period. The SGB decided to revamp the viability process. In the future, viability recommendations will be made by the SGB EC not the SGB.

**Annual Reports**

Annual reports were received from all SIGs by the requested deadline except for SIGBIO. The leadership was informed that if they submitted their report, it would be appended.

Highlights from Appendix D – SIG Annual Reports

**International Activities**

* *SIGAPP* - The main event that took place within SIGAPP for this year was the Symposium on Applied Computing (SAC) in Pisa, Italy after taking place in Salamanca, Spain, in 2015
* *SIGARCH* (co-)sponsors a strong portfolio of a variety of conferences. Most notably, the premier conference for computer architecture, ISCA, co-sponsored with IEEE, was held in Seoul in June’16 with a record attendance (about 760 registrations), record external sponsorships (about $305,000), and an incredible organization effort by the local community, including the recently formed Korean SIGARCH chapter.
* *SIGCHI* continued emphasis on international development. Goals are to help develop HCI communities around the world, and to integrate regional HCI communities into the worldwide network of HCI researchers and innovators. The SIG continues to focus on Asia, and have acknowledged this by forming an Asian Development Committee to guide efforts in the area.
* *SIGCSE* - In Europe, SIGCSE is working with several other organizations (ACM-Europe, Informatics Europe) and conferences (WiPSCE, ISSEP, CSERC, and possibly others) on creating a computing education conference or a federated conference in Europe in the future. B) ITiCSE was held in Europe for its first twenty years, but in 2016 it was held in Arequipa, Peru. By going to Peru they have generated interest from several other countries who would like to host an ITiCSE conference, including India, China and Canada. They have decided to keep ITiCSE in or near Europe for the next five years, but are considering creating a new ITiCSE-like conference that would go around the world.
* *SIGKDD-2015* conference organizers invited industry delegations from both China and India to present their work and experience.
* *SIGLOG’s* flagship conference the ACM-IEEE Symposium on Logic in Computer Science was held in July 2015 in Kyoto, Japan collocated with ICALP, the leading conference of EATCS.
* *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 2015 the conferences were held in Melbourne, Australia
* *SIGOPS* added a new chapter, ChinaSys. The ChinaSys board consists of Wenguang Chen (Tsinghua, Chair), Haibo Chen (Shanghai Jiao Tong, Vice Chair), and Yungang Bao (ICT, Treasurer). The other two chapters are Eurosys and SIGOPS de France.
* SIGSAM ISSAC 2016 was held at Wilfrid laurier University in Waterloo, Ontario Canada in-cooperation with ACM and SIGSAM and hosted by the CARGO lab

**Collaboration**

* *SIGDOC - Working with Leaders Across Technical Communication and Co-Locating Conferences*. SIGDOC leaders have created partnerships across the field. We are leaders in this area, and our conferences have been successful in part because of this cooperation. We are co-locating conferences, meeting with leaders at their conferences, and holding conference calls to discuss our goals and share ideas. In 2015, we co-located our conference with IEEE’s ProComm conference in Ireland. This allowed us to connect with scholars who might not have normally thought of SIGDOC as a place to publish and present. Our members participated in and worked with the CPTSC to coordinate an international Round Table meeting of technical and professional communication scholars in Ireland during that same time. We know that this collaboration increased our attendance and reach based on feedback from our members and field leaders.
* *SIGMIS* 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 IS 2010 Curriculum Guidelines for Undergraduate Degree Programs in Information Systems, available at http://www.acm.org/education/curricula/IS%202010%20ACM%20final.pdf. On June 30, 2015, the first public deliverable of the Model Curriculum and Guidelines for Graduate Degree Programs in Information Systems 2016 was released for review and comments.
* SIGMOBILE, in partnership with SIGCOMM, introduced a new event this year, called the Wireless Industry Days, with the goal of allowing greater engagement with our related industry. It was organized as a workshop and was held in the Bay area (co-located with a large industry-focused event) with the goal of allowing leading researchers to present their results to participants from industry. This was an interesting experiment of reaching out in new ways beyond the confines of our core conferences and workshops.
* SIGMOD is 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 very successful relatively recent example is our collaboration with SIGOPS for the Symposium on Cloud Computing (SOCC), where both SIGs were instrumental in creating what promises to become an important annual conference.

**New programs and conferences**

* *SIGARCH*- New: Lightning mentoring sessions**:** Leaders ran a very successful pilot, “Meet a Senior Architect” at ISCA’16. Several senior architects signed up to mentor graduate students in one-on-one 30 minute sessions. This was a resounding success as assessed through informal feedback and a formal survey. They plan to expand this program. SIGCOMM Two years ago, we set up an industrial liaison board whose goal is to come up with ideas and suggestions to increase industry participation at SIG-sponsored conferences.
* The *SIGCOMM* industrial liaison board has worked on many fronts to increase industry-academic collaboration:
	+ - Continued the industrial demo session at the SIGCOMM 2016 conference. This year the board accepted 8 industrial demos.
		- Worked with the Open Networking Summit to collocate the new SOSR with ONS.
		- Worked with the IETF/IRTF to create a joint ACM/ISOC/IRTF workshop ANRW.
		- Held, in collaboration with SIGMOBILE, an industry day on wireless co-chaired by Sachin Katti (Stanford) and Ranveer Chandra (Microsoft).
* *SIGDA* initiated a new program, SIGDA Live. It is a series of webinars, launched monthly or bi-monthly, on topics (either technical or non-technical) of general interest to the SIGDA community. The talks in general fall on the last Wednesday of a month, and last about 45 minutes plus 15 minutes Q&A.
* *SIGHPC* held a webinar “Oh the Places You’ll Go! HPC in the Design of Aircraft Engines”, featuring Brian E. Mitchell from GE Global Research. They had 350 people register to see it, and over 100 attend live. Over half were not SIGHPC members so it did help to spread out message to a broader community
* *SIGIR* held The first ACM SIGIR Conference on Human Information Interaction and Retrieval (CHIIR) in Chapel Hill, North Carolina, March 13-17, 2016 with Diane Kelly and Rob Capra as General Chairs. CHIIR 2017 will be held in Oslo, Norway, March 7-11, 2017 with Nils Pharo and Ragnar Nordlie as General Chairs.
* *SIGITE* has launched two new initiatives this year. They have begun efforts to establish a repository of materials for members engaged in K-12 outreach efforts. The idea is to have a collection of demonstration ideas, videos, and other resources for those engaged in exciting young people about computing field.
* *SIGKDD* - the conference hosted Industry/Government (I/G) invited talks: These talks were given by world-renowned experts, highlighting successful applications of Data Mining, Big Data, and Data Science. This program was extremely successful. The rooms for the talks were always full.
* *SIGMOBILE* recently launched the SIGMOBILE YouTube channel through which they provide video-recorded talks from their major conferences and workshops. This content is publicly available and anyone can now watch the talks at their convenience, even if they were not able to attend the conference itself. There is clearly a significant following this channel has generated, with more than 11,000 views in 2015, and an average of 3 hours of viewing activity daily. Many viewers seem to be from diverse countries, incuding Asia, South America, and Africa, thereby allowing them to reach many more constituents.
* *SIGMOD* published a special issue of SIGMOD Record called “Research Highlights”. It contained adapted versions of the eight best papers of SIGMOD 2015, PODS 2015, and VLDB 2015. These papers were rewritten for a more general computer science audience. Furthermore, a technical perspective was written by a senior member of the community for each of these papers. Three of these eight papers will be published in the “Research Highlights” column of CACM.
* *SIGPLAN* – The Programming Language Mentoring Workshop (PLMW) has been broadened to include the OOPSLA and PLDI conferences; the first offering for the former was OOPSLA'15 and for the latter it was PLDI'16. This is an opportunity to bring more students (with a special emphasis on women and minorities) into the community; it targets senior undergraduates and junior graduate students. A new steering committee has been appointed to manage the series.
* *SIGSAC* The establishment of the SIGSAC Doctoral Dissertation Award for Outstanding PhD Thesis in Computer and Information Security has been completed.
* *SIGSIM* Digest started 08/14: [www.modelingforeveryone.com](http://www.modelingforeveryone.com)
* *SIGSPATIAL* - In 2016, SIGSPATIAL was proactive in soliciting workshop proposals and designated its Treasurer, Egemen Tannin, as the Workshops Chair. He successfully created a uniform framework for them with a program of 11 concurrent workshops.
* *SIGUCCS* continued to offer semi-monthly webinars with great success. Between September 2015 and June 2016, they offered 8 webinars on a variety of technical, management and leadership topics. They identify well reviewed conference presentations, and working with the presenter, deliver the content as a webinar. This approach minimizes the management of the program and the content development time of the presenters. It also gives national exposure to presenters, an experience highly regarded and valued by the individuals and their supervisors.

**Volunteer Development**

* *SIGACCESS* drew in young researchers interested in accessibility through the ACM Student Research Competition, the ASSETS Doctoral Consortium (sponsored by NSF), a mentoring program for new authors, 6 travel scholarship awards, and support for two undergraduate ACM-W award winners.
* *SIGADA* recruited volunteers from active membership. During conferences, they ask all those interested in volunteering to talk to a member of the Executive Committee (ExCom). Volunteers are “mentored” – by working with an experienced member of the ExCom. Currently, they have a relatively stable base of volunteers and officers.
* SIGAPP – The volunteer development process is an essential issue for SigAPP. The SigAPP Executive Committee keeps looking for the new volunteers to serve as future SIGAPP officers.  They usually encourage SIGAPP members to serve as volunteers for the SAC conference which is the flagship conference of SIGAPP.   The development process is as follows,
* Encourage submission of track proposal for SAC, and serve as the track chair
* Encourage serving as a SAC organizing committee member based on the successful track chair records.
* Encourage candidacy for SIGAPP officer election.

SIGAPP’s volunteer process has been successful but they will continue to improve and establish the volunteer development process

* *SIGARCH* does not have a formal volunteer development process except to have the executive committee lead by example through its hard work. The community remains enthusiastic and has attracted volunteers as needed. The SIGARCH business meeting at ISCA’16 was standing room only with several community members ranging from graduate students to senior researchers coming forward voluntarily after the meeting to offer help for proposed programs as well as suggesting new programs.
* *SIGCHI* increased emphasis on volunteer development. They have appointed an Executive Committee member with volunteer development as her portfolio. She has developed a database to record the people who have filled committee roles at our major conferences; this will aid conference organizers in finding people for other roles and help identify candidates for mentoring to take on additional roles. They have also have begun holding “How to be a SIGCHI Volunteer” events at conferences. They held the first such event at CHI 2016, and it was very well received, resulting in several dozen people expressing interest in getting involved.
* *SIGCSE's* volunteers are recruited at conferences and on the SIGCSE listserv. Board members all attend the annual SIGCSE Symposium and encourage attendees to consider volunteering in some way. At SIGCSE.org there is a volunteer signup page with a list of SIGCSE positions that one can express interest in. New volunteers are chosen from this list. Volunteers for a particular role are trained by the person previously in that role. Many positions are overlapping rotating positions such as for the SIGCSE Bulletin where two people work together, one experienced and one new.
* *SIGDOC* is very focused on developing volunteers. The Board is active in mentoring scholars in the field, with the goal of having them running for office, leading special issues of CDQ, and working across the field in leadership roles. They use CDQ to engage in mentoring and development activities for production and development roles, mentoring junior scholars in the publishing process. Many of these represent a new pool of volunteer talent they’ve developed.
* *SIGecom’s* volunteer development is extremely strong. Many dozens of people serve across a wide range of roles: in the conference organization committee; organizing committees for various workshops; tutorial presenters; TEAC editors in chief and associate editors; SIGecom Exchanges editors; SIG executive; three best paper award committees. They are extremely conscious of diversity—particularly, but not limited to, diversity across research areas, countries of origin, and gender—and have been very successful in ensuring that our volunteer leaders are diverse, reflective of the community at large, and top-caliber researchers.
* *SIGGRAPH* Student Services Committee (S3) took over the XSV (ex-student volunteer) program. This program places ex-student volunteers into positions on SIGGRAPH Executive Committees and Conference Committees. The goal for each XSV is to increase their knowledge of SIGGRAPH, foster their network within SIGGRAPH and groom them for future volunteer roles. SIGGRAPH was able to match 8 volunteers in FY15, 4 of which are with ACM SIGGRAPH Executive Committees.
* *SIGITE* continues to have an atmosphere of contribution amongst its members. Finding volunteers for various activities has never been a problem. As a recent example, less than 24 hours after a call to the membership for people to serve as session chairs at the upcoming annual conference, they had nearly twice the necessary volunteers. While about half of these volunteers were familiar names, the other half represented new involvement by members. Developing future SIG leaders is more involved; however, we have taken steps to foster the process. The creation of two committees, each with a membership of about 15 people, provides an opportunity for several members to work with the current SIG leadership and become involved in important SIG initiatives. These committees should serve as a springboard for members to become more involved in SIG leadership.
* *SIGKDD*Volunteer development process**:** Volunteers mainly consist of conference organizers and student helpers. In appointing conference organizers, function chairs, and senior and regular program committee (PC) members, they strive for diversity in terms of gender composition, geography location, and seniority. In last year’s SIGKDD Executive Committee (EC) meeting, EC also decided to appoint Industry/Government (I/G) track Program Committee (PC) Chairs directly by EC as EC wants to the I/G track PC Chairs to have the same status as the PC Chairs for the research track, and to ensure the diversity of the track chairs so that the same people will not be appointed multiple times, which happened previously when they were appointed by research track PC chairs.
* *SIGMIS* - The 2017 conference will be held in Bangalore, India with which they are expanding their volunteers and increasing their membership reach.
* *SIGMM* - to develop the rising leadership of the multimedia community, leadership launched the inaugural SIGMM Workshop on Multimedia Frontiers, highlighting plenary talks by 12 junior leading researchers in multimedia. The plenary talks by the junior star speakers were followed by on-site comments from senior leaders in related fields, igniting lively discussion about the exciting directions and challenges in the multimedia community. SIGMM local chapters (Bay Area and China) also continue to host extremely vibrant programs bringing together new blood into the community.
* *SIGWEB* - In order to increase volunteer involvement, they have started a program in which local groups can get seed funding for new initiatives to explore new scientific areas of interest. The expectation is that some of these new areas can mature and either join existing conferences (as new tracks or workshops), or evolve into new symposia.

**Notable Papers**

* *SIGACCESS* - ASSETS Paper Impact Award, SIGACCESS recognized the lasting impact of early work on designing for diverse users presented by Peter Gregor, Alan Newell and Mary Zajicek at ASSETS 2002 in the paper *Designing for Dynamic Diversity: Interfaces for Older People*. The paper focuses attention on the changing nature of user requirements, and describes two influential design approaches that can address this challenge.
* *SIGCOMM* 2016 Test of Time Awards Papers are:
	+ *Link-level measurements from an 802.11b mesh network* byDaniel Aguayo, John Bicket, Sanjit Biswas, Glenn Judd, Robert Morris and published in SIGCOMM 2004. This paper was one of the first attempts to bring a “systems approach” to wireless networking and in particular provides key lessons from one of the first real operational deployments of wireless mesh networks. The impact of this work was in spawning new directions in wireless network research and in significantly raising the bar for research and evaluation in this domain by bringing to the fore real-world complexities of wireless signal propagation.
	+ *A first-principles approach to understanding the Internet's router-level topology* byLun Li, David Alderson, Walter Willinger, John Doyle and published in SIGCOMM 2004.This paper questioned the prevailing work on scale-free graph structure for network topologies that incorrectly speculated an “Achilles’ heel” for the Internet, and instead provided a methodologically sound basis to explain the observed structure of Internet topologies. The impact of the paper was in bringing a greater degree of rigor in network topology research and evaluation, and in informing the community of potential pitfalls in using black-box network models without a clear understanding of underlying structural effects in network design.
* *SIGEVO* - Impact Award: For the sixth time, the “SIGEVO Impact Award” was given in 2016 to recognize up to 3 high impact papers that were published in the GECCO conference proceedings 10 years earlier. 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 two papers published in GECCO 2006 proceedings: *Reference point based multi-objective optimization using evolutionary algorithms by* Kalyanmoy Deb, and J. Sundar.
	+ *Search-based determination of refactorings for improving the class structure of object-oriented systems by*Olaf Seng, Johannes Stammel, and David Burkhart.
* *SIGIR* introduced a new Test of Time Award. The SIGIR Test of Time Award recognizes research that has had long-lasting influence, including impact on a subarea of information retrieval research, across subareas of information retrieval research, and outside of the information retrieval research community (e.g. non-information retrieval research or industry). The winning paper is selected from the set of full papers presented at the main SIGIR conference 10-12 years before. At SIGIR 2015 the award was presented to Susan Dumais, Edward Cutrell, JJ Cadiz, Gavin Jancke, Raman Sarin, and Daniel C. Robbins for their SIGIR 2003 paper “*Stuff I’ve seen: a system for personal information retrieval and re-use*”.
* *SIGKDD*  - KDD Test-of-Time awards honor papers published in a KDD conference at least 10 years ago that have made significant impact in research. KDD-2015’s awards were given to the following three papers: Thorsten Joachims, “*Optimizing Search Engines using Clickthrough Data*,” KDD 2002. Pedro Domingos and Geoff Hulten, “*Mining High-Speed Data Streams*,” KDD 2000. Minqing Hu and Bing Liu. “*Mining and summarizing customer reviews*,” KDD 2004.
* *SIGMETRICS* - The SIGMETRICS Test of Time Award: Bhuvan Urgaonkar, Giovanni Pacifici, Prashant Shenoy, Mike Spreitzer, and Asser Tantawi received the award for their paper "An analytical model for multi-tier internet services and its applications." Published in the Proceedings of ACM SIGMETRICS 2005.
* SIGMICRO Test of Time Award: “*BIRD: Binary Interpretation using Runtime Disassembly*” by Susanta Nanda, Wei Li, Lap-Chung Lam and Tzi-cker Chiueh marks a turning point in achieving complete disassembly of commercially distributed x86 binaries.  BIRD attains complete disassembly by combining static and dynamic disassembly in a novel way.  BIRD uncovers as many instructions as possible statically, deferring the hard to find instructions until runtime at which point when the program transfers to a statically unknown area BIRD disassembles the instructions. By integrating static and dynamic disassembly together, BIRD achieves 100% coverage with low run-time overhead. BIRD has emerged as a building block in the development of binary transformation and analysis systems.  The BIRD is the WORD!
* *SIGSOFT* - 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. This year, the award went to the paper “*Finding Bugs with a Constraint Solver*” by Daniel Jackson and Mandana Vaziri, from the Proceedings of the 2000 ACM SIGSOFT International Symposium on Software Testing and Analysis (ISSTA 2000).