Annual Report of the SIG Governing Board

For the period 1-July-08 through 30-June-09

Submitted by: Alexander L. Wolf

- October-2009

1. Governance

1.1 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.

1.2 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:

SGB Chair

SGB Past Chair

Vice Chair for Operations – Presides over SGB meeting, including SGB EC conference calls

Vice Chair for SIG Development – Identifies emerging technical areas, oversees transitional SIGs, the SGB Information Director, SGB committees, and SIG Liaisons to ACM Boards.

Secretary – Acts as elections advisor, policy advisor and financial and budgetary advisor **Conference Advisor** – Oversees issues related to conferences as directed by the SGB

Large SIG Advisor – Acts as liaison for large SIG issues

Small SIG Advisor – Acts as liaison for small SIG issues

Publications Advisor – Acts as liaison between SGB and Publications Board

Director of SIG Services - Staff liaison

During FY'09 the following individuals held the positions indicated:

Name	Position	Term End
Alexander L. Wolf	Chair	July 1, 2010
Joseph A. Konstan	Past Chair	July 1, 2010
Jamie Callan	Conference Advisor	July 1, 2009
Kathleen S. Fisher	Vice Chair for SIG Development	July 1, 2010
David B. Johnson	Small SIG Advisor	July 1, 2010
Vicki Hanson	Vice Chair for Operations	July 1, 2009
Diana Marculescu	Secretary	July 1, 2010
Julie A. Jacko	Large SIG Advisor	July 1, 2009
Jack Davidson	Publications Advisor	July 1, 2011
Donna Cappo	Staff Liaison	

1.3 Council Representatives

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

During FY'09 the following individuals held the ACM Council positions indicated:

Name	Position	Term End
Alexander Wolf	SGB Chair	July 1, 2010
Norm Jouppi	SGB Representative	July 1, 2009
Robert Walker	SGB Representative	July 1, 2010
Jack Davidson	SGB Representative	July 1, 2010

1.4 Standing Committees

The SGB is responsible for the oversight of the Federated Computing Research Conference Steering Committee currently chaired by Daniel Menasce. SGB representatives chose San Jose as the location of FCRC'11. The event will be held from June 3 - June 11, 2011 and chaired by Dean Tullsen of UCSD.

1.5 Significant SGB actions

The SGB EC appointed two task forces in response to SGB leadership concerns. The first was a SIG Development Task Force charged with identifying new areas and communities not served by the current conferences/SIGs. The task force was led by Joe Konstan (Past SGB Chair and past SIGCHI Chair) and included Bill Griswold (SIGSOFT Chair), Julie Jacko (SIGCHI Chair) Norm Jouppi (SGB Rep and past SIGARCH Chair), Bernard Rous, ACM Deputy Director of Publications and Donna Cappo, Director of SIG Services.

The group reviewed workshop lists, ACM pubs, external conferences and publications and brainstormed to develop candidate areas. They then conducted a survey of the SGB to assess interest and activity in those areas and suggested a development process for institutionalizing outreach.

The plan included establishing a policy of pro-active, lightweight outreach by the SGB overseen by the VC of SIG Development. The goal was to identify 4-5 areas the SGB would like to pursue, assign an SGB point person, and develop a prototype structure. The SIGs were encouraged to work individually or in teams to address areas not being handled centrally. The SGB EC Chair agreed to take the recommendations under advisement for further action. As a result of the task force activities, SIGMOD and SIGMOBILE have established a Cloud Computing Workshop and the SGB is planning to sponsor a Bioinformatics conference in August 2010. Konstan is acting as the SGB point person on this activity.

The second task force reviewed SIG membership trends and surveyed lapsed SIG members to determine what actions the SIGs can take to retain members and encourage more to join. The SGB realized the need to think about SIG membership as a long-term strategic issue rather than develop short-term answers. The SGB Chair reviewed the lapsed member information with the SGB EC and asked Vicki Hanson to continue in her role as TF leader for the next phase of this activity.

1.6 Miscellaneous Appointments

SIG leaders appointed as committee liaisons:

Name	Position	Term End
Jack Davidson	Publications Board Liaison	July 1, 2011

Daniel Menasce Robert Walker	FCRC Steering Comm. Chair Awards Committee Liaison	July 1, 2011 July 1, 2010
Brent Hailpern	History Committee Liaison	July 1, 2011
Emil Volchek	USACM Liaison	•
Jeanna Matthews	USACM Liaison	

1.7 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
Joseph Konstan	Past SGB Chair	July 1, 2010
Alexander L. Wolf	SGB Chair	July 1, 2010
Donna Cappo	Staff Liaison	·

2. SIGs and SIG Membership

Appendix A summarizes basic SIG Statistics for FY'09. Included are member and subscriber totals, newsletter and proceedings activity, and conference involvement.

2.1 Membership Counts by class of membership:

	FY'07	FY'08	FY'09
ACM/SIG Members	33,937	33,544	32,095
SIG Only Members	10,554	9,519	9,837
Subscribers	2,300	2,019	1,859
Total SIG Memb/Subs	46,791	45,082	43,791
Total ACM Members	82,791	89,301	94,533

The SIGs overall member/subscriber count is 43,791 as compared to 45,082 in FY'08.

2.2 Membership Renewal Rates

Membership renewal rates are indicators of several realities, including 1) the degree to which members are satisfied with the services they are receiving as a result of membership and 2) the rate at which individuals are leaving the technical specialty.

The SIGs with the highest retention are:		The SIGs with the lowest retention	
		are:	
Ada	83%	APP	46%
OPS	81%	CHI	59%
CSE	80%	Ecom	61%
SPATIAL	80%	UCCS	62%
MICRO	79%	MOD	62%

3. New SIG Formation and Dissolution

No new SIGs were chartered in FY'09, nor were any dissolved.

4. SIG Program Reviews and Annual Reports

4.1 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 SIGs 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 10 full program reviews during the year: SIGART, SIGECOM, SIGKDD, SIGMICRO, SIGMM, SIGMOD, SIGSAC, SIGSAM, SIGSIM and SIGSOFT were deemed viable under existing criteria.

4.2 Annual Reports

Annual reports for FY'09 were received from all SIGs:

SIGACCESS, SIGACT, SIGAda, SIGAPP, SIGARCH, SIGART, SIGBED, SIGCAS, SIGCHI, SIGCOMM, SIGCSE, SIGDA, SIGDOC, SIGECOM, SIGEVO, SIGGRAPH, SIGIR, SIGITE, SIGKDD, SIGMETRICS, SIGMICRO, SIGMIS, SIGMOBILE, SIGMOD, SIGMM, SIGOPS, SIGPLAN, SIGSAC, SIGSAM, SIGSIM, SIGSOFT, SIGSPATIAL, SIGUCCS, SIGWEB.

5. SIG Technical Highlights

The strength of the SIGs lies in their technical excellence. Once again we have seen a continued growth in conferences, improvements in publications, innovations in many areas, expansion of the awards program, increased attention to educational activities and increased cooperative efforts among the SIGs. The following excerpts from the FY'09 SIG Annual Reports detail only some of the outstanding activities going on in the SIG Community. I urge you to review the individual SIG Annual reports, which can be found in Appendix D.

5.1 Electronic Community

The SIGACCESS website recently received a new look. This accessible site was created and is maintained by the new SIGACCESS webmaster, Darren Lunn of the University of Manchester. Also available on the SIGACCESS website is the monthly 'left field' column (see http://www.sigaccess.org/community/left_field/) 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.

KDD-09 featured a novel conference social networking and scheduling platform, http://kdd09.crowdvine.com/ It provided conference attendees with many useful abilities, including managing conference schedule, meeting each other, and commenting on papers. SIGKDD is in process of evaluating the success of this effort.

5.2 Publications

John Impagliazzo became Editor-in-Chief of the SIGCSE Bulletin in 1997. The consistent high quality of inroads led to the approval by the ACM Publications Board for SIGCSE to transition inroads to ACM magazine status and the unbundling of the conference proceedings from inroads beginning in 2010. Currently inroads is classified as a newsletter, but this in no way reflects the scholarly work that appears in it.

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 workshop that it will sponsor in 2009. These workshops were proposed independently to SIGSPATIAL. In 2010, SIGSPATIAL will actively solicit workshop proposals and will also designate a Workshops Chair for the ACM GIS Conference as well as delegate such duties to one of its officers who will be tasked with creating a uniform framework for them.

The SIGPLAN CACM Research Highlights Nomination Committee, chaired by Ben Zorn, nominated nine papers for consideration by the CACM Research Highlights editorial board. In recognition of the honor of being so chosen, these papers are listed on the SIGPLAN web site. Of these nine (3 from PLDI, 1 from LCTES, 1 from PPoPP, 3 from POPL, and 1 from ICFP), two have appeared in CACM: "Formal Certification of a Compiler Back-end" (retitled "Formal Verification of a Realistic Compiler") and "Scalable Synchronous Queues."

SIGMETRICS is working on a proposal for a new transactions-style journal, tentatively called ACM Transactions on Modeling and Performance Evaluation (ToMPE). An initial proposal was submitted to the ACM Publications Board, and the feedback from ACM and several closely-related SIGs is being incorporated into the next version of the submission.

5.3 Technical Meetings

This year's SIGAda conference celebrated the 30th anniversary of the Ada programming language. The keynote speakers each presented on a topic related to the birth of Ada 30 years ago.

SAC 2009 was held in Honolulu, Hawaii, March 8-12, 2009, hosted by Chaminade University of Honolulu and the University of Hawaii at Manoa. Thanks to a great organizing committee, it was extremely successful. The number of SAC papers submitted was 1084, the second highest ever, in 45 tracks with 316 papers accepted based upon extensive Track reviews, for a 29% ratio. The poster session featured 97 posters, the most number ever.

From 2006 to 2008, SIGBED has made a conscious effort to bring together related meetings. ESWEEK is now established as the major event in embedded systems research by hosting EMSOFT as well as CODES-ISSS (a conference focused on low-level issues of design and implementation of embedded systems) and CASES (a conference with emphasis on architecture and compiler aspects of embedded systems).

SIGCHI continues to sponsor a mix of long-running and newer conferences which provide the highest-prestige outlets for research while also serving as venues for emerging work (e.g., the workshop programs and poster sessions in many of our conference), promoting student education (e.g., the doctoral colloquia and student volunteer programs in our conferences), and promoting continuing professional education and networking (e.g., the tutorial and course programs and our special interest group gatherings and recruiting and networking events). Most of its conferences are stable, and are well run by the communities they serve. Substantial direct effort goes into the flagship CHI conference, which has undergone continuous redesign and evaluation.

MobiCom 2008 featured an N^2 Women lunch. Networking Networking Women is a discipline-specific community for researchers in the communications and networking research fields. The main goal of N^2 Women is to foster connections among the under-represented women in computer networking and related research fields. N^2 Women was founded in 2006, with its first meeting at MobiHoc 2006, and is a program of SIGMOBILE; N^2 Women is also supported by the IEEE Communications Society and Microsoft Research.

As recently as 2002, SIGWEB was sponsoring only two conferences, HT (100%) and JCDL (34%). About this time, SIGWEB's leaders embarked on a plan to expand the SIG's scope via a wider range of sponsorships. SIGWEB now sponsors five conferences regularly and is in discussions with other conference and workshop organizing committees about further sponsorships.

In 2008, SIGMOD, SIGKDD, SIGIR and SIGWEB co-sponsored the First ACM International Conference on Web Search and Data Mining (WSDM, http://www.wsdm08.org), which was very successful. The interdisciplinary nature of Web search and data mining led to the creation of WSDM. The general chair of WSDM'08 was Marc Najork (Microsoft) and the program co-chairs were Andrei Broder (Yahoo!) and Soumen Chakrabarati (IIT Bombay). 151 papers were submitted and 24 papers were accepted. The conference had 239 attendees and a healthy surplus of \$52,452 of which SIGMOD receives 25%.

The newly expanded Computer Animation Festival at SIGGRAPH was open to the public for the first time ever. In addition to competition and invited screenings, production sessions, and discussion panels with filmmakers/artists/producers, the Festival featured three all-star production studio nights hosted by Pixar Animation Studios, Sony Pictures Imageworks, and Lucasfilm.

The Tenth ACM Conference on Electronic Commerce (EC'09) was held in July 2009 in Stanford, CA. The conference attracted 161 submissions, the second most in its history. The forty accepted papers formed a very strong technical program covering a range of topics from core theoretical foundations to practical innovations in the multi-billion dollar online advertising industry. About 180 people attended the main conference or the associated workshops and tutorials, at or near a record high.

5.4 Professional Recognition/Awards

Sponsors ACCESS	Award SIGACCESS Best Paper Award	Awardee J. Feng, J. Lazar, L. Kumin, A. Ozok
	SIGACCESS Best Student Paper Award	Y. Borodin, J.P. Bigham, R. Raman, I.V. Ramakrishnan
	SIGACCESS AWARD for Outstanding Contributions to Computing and Accessibility	Jim Thatcher
ACT	Godel Prize (with EATCS)	Omer Reingold, Salil Vadhan, Avi Wigderson
	Knuth Prize Danny Lewin Best Student Paper Award Edsger W. Dijkstra Prize in Distributed Computing (with SIGOPS)	Volker Strassen Robin Moser Baruch Awerbuch, David Peleg
Ada	SIGAda Outstanding Ada Community Contribution SIGAda Distinguished Service Award	Peter Amey, John McCormick Greg Gicca
APP	SIGAPP Distinguished Service Award	Ronaldo Menezes
ARCH	Eckert-Mauchly Award (co-sponsored with IEEE CS) Maurice Wilkes Award Influential ISCA Paper	Joel Emer Shubu Mukherjee Jeffrey Kuskin, David Ofelt, Mark Heinrich, John Heinlein, Richard Simoni, Kourosh Gharachorloo, John Chapin, David Nakahira, Joel Baxter, Mark Horowitz, Anoop Gupta, Mendel Rosenblum, John Hennessy
	SIGARCH Distinguished Service Award	Mark Hill
ART	Autonomous Agents Research Award	Manuela Veloso
BED	Frank Anger Memorial Award (with SIGSOFT) SIGBED-EMSOFT Best Paper Award	Georgios Fainekos Rajeev Alur, Aditya Kanade, S. Ramesh, K. C. Shashidhar
CHI	CHI Lifetime Achievement Award CHI Lifetime Service Award CHI Social Impact Award	Sara Kiesler Clare-Marie Karat, Steven Pemberton Helen Petrie
COMM	SIGCOMM Lifetime Achievement Award SIGCOMM Rising Star Award	Jon Crowcroft Dina Papagiannaki
CSE	SIGCSE Award for Outstanding Contributions to Computer Science Education The SIGCSE Lifetime Service Award	Elliot Koffman Michael Clancy
DA	SIGDA Distinguished Service Award ACM Outstanding Ph.D. Dissertation Award in EDA SIGDA Outstanding New Faculty Award ACM/IEEE A. R. Newton Award	Nikil Dutt, Eli Bozorgzadeh, Vikas Chandra Kai-Hui Chang Yu Kevin Cao Robert Brayton, Richard Rudell, Alberto Sangiovanni-Vincentelli, Albert R. Wang
DOC	Rigo Award	Susanne Bødker, Pelle Ehn
GRAPH	SIGGRAPH Computer Graphics Achievement Award Significant New Researcher Award SIGGRAPH Outstanding Service Award	Ken Perlin Maneesh Agrawala Stephen Spencer
IR	Gerard Salton Award	Susan T. Dumais

SIGKDD Innovation Award SIGKDD Service Award Padhraic Smyth Sunita Sarawagi KDD SIGKDD Doctoral Dissertation award Jure Leskovec **METRICS**

SIGMETRICS Achievement Award SIGMETRICS Rising Star Researcher Award Kenneth C. Sevcik Outstanding Student Paper Award Frank Kelly Alexandre Proutiere Jinwoo Shin, Devavrat Shah, Shreevatsa Rajagopalan.

Klodwig Mgaya, Faith-Michael Uzoka, Ernest Kitindi, Alice Shemi MIS Magid Igbaria Outstanding Conference Paper Award

MM SIGMM Award for Outstanding Technical Contributions Ralf Steinmetz

OPS	Mark Weiser Award	Peter Druschel
PLAN	ACM SIGPLAN PL Achievement Award SIGPLAN Distinguished Service Award SIGPLAN Outstanding Doctoral Dissertation Award Most Influential ICFP Paper Award Most Influential OOPSLA Paper Award Most Influential POPL Paper Award Most Influential PLDI Paper Award John Vlissides Award	Rod Burstall Mamdouh Ibrahim Michael Bond, Viktor Fafeiadis (1998) Lennart Augustsson David G. Clarke, John M. Potter, James Noble Andrew C. Myers Matteo Frigo Ciera Jaspan
SAC	SIGSAC Outstanding Contribution Award SIGSAC Outstanding Innovation Award	Ravi Sandhu Dorothy Denning
SAM	ISSAC Distinguished Paper Prize ISSAC Distinguished Student Author Prize SIGSAM Richard Dimick Jenks Memorial Prize	Adam Strzebonski Adrien Poteaux The GAP Group
SIM	Distinguished Contribution Award	Ray J. Paul
SOFT	ACM SIGSOFT Distinguished Service Award Outstanding Research Award SIGSOFT Impact Paper Award SIGSOFT Influential Educator Award	Stuart Zweben Richard Taylor Alex Wolf, David Rosenblum Laurie Williams
UCCS	SIGUCCS Penny Crane Award	Jerry Smith
WEB	Vannevar Bush Award (with SIGIR) Douglas C. Engelbart Award Theodor Holm Nelson Award	Steven Bethard, Philipp Wetzler, Kirsten Butcher, James H. Martin, Tamara Sumner Nicolas Neubauer, Klaus Obermayer Thomas Beauvisage

5.5 Educational Programs and Special Projects

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 \$20,000 per conference, depending on the conference size. Funding students is a good way of ensuring long term growth and vitality of the AI community.

This year SIGCOMM decided to add its support to ACM-W's scholarship program. ACM-W provides approximately 12 scholarships of \$500 each to help women students attend a research conference. SIGCOMM decided to augment the scholarship for any recipient who chooses to attend a SIGCOMM-sponsored or in-cooperation conference or workshop. The additional funds provided by SIGCOMM will cover full costs of travel, lodging, and conference registration. In addition, SIGCOMM will help find informal mentors for such students before they arrive at the conference.

Early in 2008, the SIGUCCS Awards Committee proposed and the Executive Committee approved a new program, the SIGUCCS Grant Program, to provide partial support for students and employees in institutions of higher education to participate in the annual SIGUCCS Fall Conferences and Spring Management Symposia. This support is funded by SIGUCCS and consists of a complimentary conference registration and hotel room accommodations. Grants were made for each of our conferences for the first time in 2008-2009.

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 next version of the curriculum, IS2009 Model Curriculum and Guidelines for Undergraduate Degree Programs in Information Systems is being finalized.

SIGMICRO is working to capture its history, via an oral history project under the auspices of the larger ACM oral history project. Yan Solihin of North Carolina State is leading this effort, and has begun his work with the first person to be interviewed. These oral histories will be available to SIGMICRO members via the Digital Library. The first set of interviews for the oral history have been completed and are currently being transcribed and summarized.

This year's SIGITE conference also included a highly successful meeting of IT department chairs immediately preceding the conference proper. The meeting allowed IT department chairs to discuss a number of issues, including how to increase research output and external research funding and how to effectively implement fair tenure and promotion processes.

5.6 International Activities

SIGCOMM continues its geodiversity travel grants: For the fourth year in a row, we have awarded travel grants to support junior researchers from under-represented regions in attending the main SIGCOMM conference; this year, support was extended to selected authors at the Latin American Networking Conference (LANC 2009).

As part of SIGSOFT's international outreach efforts, we co-supported a special session at the annual India Software Engineering Conference. This session features presentations of ICSE and FSE from the previous year that won ACM Distinguished Paper Awards. The authors of the winning papers are flown to India to re-present their papers. This has been highly successful, being lauded by both the ISEC organizers as well as the ICSE and FSE authors who have flown to the conference. SIGSOFT plans to continue supporting this effort in the future.

The idea for the ACM SIGGRAPH India Chapters Advisory Council came out of the desire to make sure that there is active collaboration between any chapters established in India and other that may have an interest in promoting computer graphics and interactive techniques in India. The initial guidelines and membership group have been discussed and may be finalized at SIGGRAPH 2009. Once our first chapter is chartered – currently, Bangalore is In Formation – we will begin regular meetings of this group.

SIGEVO held the "Genetic and Evolutionary Computation Summit" in Shanghai, China, June 12-14, 2009. The goal was to bring together leading Western researchers with faculty, industry, and students involved in Evolutionary Computation in China and other Asian nations. SIGEVO's goal was to make Genetic and Evolutionary Computation more accessible to the many researchers and practitioners in China and throughout Asia.

The Tenth ACM Conference on Electronic Commerce (EC'09) was held in July 2009 in Stanford, CA. The conference attracted 161 submissions, the second most in our history. The forty accepted papers formed a very strong technical program covering a range of topics from core theoretical foundations to practical innovations in the multi-billion dollar online advertising industry. About 180 people attended the main conference or the associated workshops and tutorials, at or near a record high. The healthy attendance combined with substantial corporate support, including from Google, HP, Microsoft, and Yahoo!, raised by the Conference Chair (John Chuang, Berkeley) made this a financial as well as a technical success.

5.7 Collaborative Efforts

SIGARCH was a partial supporter of an NSF-sponsored workshop on Computer Architecture and Parallel Computing held at Brown University in August, 2008. This workshop, aimed primarily at women and under-represented minority undergraduates, is intended to interest young students in the field of computer architecture and to encourage their pursuit of graduate school and a research career. 40 students the program, and SIGARCH funding (along with NSF and industry support) supported their travel and workshop expenses.

SIGCAS has continued to build a collegial relationship with the International Society for Ethics and Information Technology (INSEIT), and had a representative at the 2009 CEPE conference in Greece this past June. We are also presenting SIGCAS panels, workshops and tutorials at CCSC conferences (Consortium for Computer Science in Colleges).

A new ACM Symposium on Cloud Computing that is jointly sponsored by SIGMOD and SIGOPS was proposed with plans to co-locate the first instance with SIGMOD 2010.

Appendix A – Membership & Technical Activity Summary Appendix B – Financial Summary

Appendix C – Conference Summary Appendix D – Individual SIG Reports