



About SIGMOBILE

History
Bylaws
Executive Committee
Annual Meetings
Annual Reports

Chapters

Publications

MC²R
E-News

Events

Sponsored Conferences
Sponsored Workshops
In-Cooperation Events
Requesting Sponsorship

Awards

Distinguished Service
Outstanding Contribution
Best Paper

Membership

Benefits
Online Application

PhD Theses

SIGMOBILE Annual Reports

SIGMOBILE FY'08 Annual Report

July 2007 - June 2008

Submitted by: David B. Johnson, SIGMOBILE Chair

I. Introduction

SIGMOBILE, the ACM Special Interest Group on Mobility of Systems, Users, Data, and Computing, is a vibrant, successful SIG, serving its members and the community. The scope of SIGMOBILE's interests includes all things related to *mobility*, such as mobile computing and mobile and wireless networking. SIGMOBILE is the premier organization in the world devoted to this rapidly growing research area and its applications.

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

- Chair: *Prof. David B. Johnson* (Rice University, USA),
- Vice Chair: *Dr. Jason K. Redi* (BBN Technologies, USA),
- Treasurer: *Prof. Tracy Camp* (Colorado School of Mines, USA), and
- Secretary: *Prof. Chiara Petrioli* (University of Rome "La Sapienza," Italy).

Also a member of SIGMOBILE's Executive Committee is the SIGMOBILE Past Chair, *Dr. Victor Bahl* (Microsoft Research, USA). In addition, SIGMOBILE's leadership currently includes four appointed positions:

- Editor-in-Chief of SIGMOBILE's journal/newsletter for our members, *Mobile Computing and Communications Review* (MC²R): *Prof. Srikanth Krishnamurthy* (University of California, Riverside, USA);
- Information Director: *Dr. Robert Steele* (University of Technology, Sydney, Australia);
- Workshop Coordinator: *Prof. Ahmed Helmy* (University of Florida, Gainesville, USA); and
- Digital Library Coordinator: *Dr. Guanling Chen* (University of Massachusetts Lowell, USA).

II. New SIGMOBILE Programs

This year, SIGMOBILE became the sponsor of the HotMobile workshop, previously sponsored annually by IEEE Computer Society. HotMobile, the Workshop on Mobile Computing Systems and Applications, was first held in 1994 (the workshop changed its short name from WMCSA to HotMobile in 2007). It is a highly selective, interactive workshop focused on mobile applications, systems, and environments, as well as their underlying state-of-the-art technologies. Previously, HotMobile had been "in-cooperation with" SIGMOBILE in most years, but this year, the organizers decided to change from IEEE to SIGMOBILE sponsorship. We are excited about the opportunity to become more closely associated with and sponsor this excellent workshop series. HotMobile is held each year in February; this will be the first time that SIGMOBILE has sponsored a workshop separate from those co-located with our conferences.

Also this year, the Networking Networking Women (N² Women) organization became a program of SIGMOBILE. 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. The first meeting of N² Women was held at SIGMOBILE's MobiHoc 2006 conference, and since then, several other meetings have been held at various ACM and IEEE conferences, including MobiCom 2006, SenSys 2006, MobiSys 2007, MobiCom/MobiHoc 2007, MobiHoc 2008, and MobiSys 2008. N² Women is now a program of SIGMOBILE and is also supported by the IEEE Communications Society and Microsoft Research.

III. SIGMOBILE Conferences and Workshops

MobiCom 2007, *the 13th Annual International Conference on Mobile Computing and Networking*, and MobiHoc 2007, *the 8th ACM International Symposium on Mobile Ad Hoc Networking and Computing*, were held co-located together, September 9-14, 2007, in Montreal,

Quebec, Canada. The MobiCom conference series covers all areas of mobile computing and mobile and wireless networking at the link layer and above, whereas the MobiHoc conference series focuses on the challenges emerging from wireless ad hoc networking and computing, also focused on issues at or above the link layer.

Prof. Evangelos Kranakis (Carleton University, Canada) served as the General Chair for the combined MobiCom/MobiHoc 2007 week. The two conferences operated independently as usual (e.g., with separate program committees), yet some events in the conference schedules were shared, including keynote addresses, breaks, and meals. A single registration fee included admission to both conferences and a copy of both conference proceedings. Co-locating the two conferences in this way was an experiment, motivated largely by the increasing fragmentation of our community into many different conferences (including SIGMOBILE's conference and others), resulting in more competition in travel schedules and budgets for everyone and decreasing the feeling of "community," where you can see everyone working in fields related to SIGMOBILE at one event.

The feedback from attendees on this experiment was generally quite positive, although a few objected to the fact that, with the sessions of the two conferences running in parallel with each other, it was not possible to attend every session. Based on the strong positive feedback, we are considering co-location again, although logistically, we will not be able to do it for MobiCom and MobiHoc again until 2010. For 2008, plans for MobiCom and MobiHoc were already underway before we could see the community's reaction to co-location in 2007; For 2009, we are planning to hold MobiCom in Beijing, and with MobiHoc 2008 being held in Hong Kong, we decided not to hold MobiHoc two years in a row in Asia in locations this close to each other.

For MobiCom 2007, the Program Co-Chairs were *Prof. Jennifer Hou* (University of Illinois, Urbana-Champaign, USA) and *Dr. Ram Ramanathan* (BBN, USA). MobiCom 2007 received 233 paper submissions from authors in 28 different countries; 26 of these papers were accepted as full papers to be presented at the conference, for an acceptance rate of 11.2%.

For MobiHoc 2007, the Program Co-Chairs were *Prof. Elizabeth M. Belding* (University of California, Santa Barbara, USA) and *Prof. Eytan Modiano* (MIT, USA). MobiHoc 2007 received 146 papers submissions from authors in 24 different countries; 27 of these papers were accepted to make up the conference technical program, for an acceptance rate of 18.5%.

MobiCom and MobiHoc 2007, in plenary sessions, featured two keynote talks, one by *Prof. Leonidas J. Guibas* (Stanford University, USA), entitled "The Geometry of Mobility," and a second by *Prof. David Tse* (University of California, Berkeley, USA), entitled "Breaking the Interference Barrier." In addition, the plenary portion of the MobiCom and MobiHoc 2007 program featured an invited talk by the winner of the 2007 SIGMOBILE Outstanding Contribution Award, *Prof. David E. Culler* (University of California, Berkeley, USA). MobiCom and MobiHoc 2007 also featured one day tutorials and two days of workshops. The tutorials, on September 9, included 4 half-day tutorials:

- Security and Cooperation in Wireless Networks: *Prof. Jean-Pierre Hubaux* and *Dr. Panos Papadimitratos* (EPFL, Switzerland)
- Cognitive Networks: *Prof. Luiz A. DaSilva* and *Prof. Allen B. MacKenzie* (Virginia Tech, USA)
- Vehicular Ad Hoc Networks: *Prof. Hannes Hartenstein* (University of Karlsruhe, Germany) and *Dr. Ken Laberteaux* (Toyota Technical Center, USA)
- Protecting Location Privacy in Mobile Computing Systems: Architecture and Algorithms: *Prof. Ling Liu* (Georgia Tech, USA)

The workshops, on September 10 and 14, included 6 full-day workshops:

- SANET 2007: The First ACM Workshop on Sensor Actor Networks
- WinTech 2007: The Second ACM International Workshop on Wireless Network Testbeds, Experimental evaluation and CHaracterization
- VANET 2007: The Fourth ACM International Workshop on Vehicular Ad Hoc Networks
- WUWNET 2007: The Second ACM International Workshop on UnderWater Networks
- CHANTS 2007: The Second Workshop on Challenged Networks
- CRAWDAD 2007: A Community Resource for Archiving Wireless Data At Dartmouth

In addition, continuing a tradition started two years ago at MobiCom 2005, again for 2007, the conference hosted an ACM Student Research Competition (SRC). Participation in the SRC this year was again great, with 16 students entered.

MobiCom 2008 will be held September 14-19, 2008, in San Francisco, California, USA.

MobiHoc 2008, *the 9th ACM International Symposium on Mobile Ad Hoc Networking and Computing*, was held May 27-30, 2008, in Hong Kong SAR, China. The General Chair for MobiHoc 2008 was *Prof. Xiaohua Jia* (City University of Hong Kong, China), and the Program Co-Chairs were *Prof. Ness B. Shroff* (The Ohio State University, USA) and *Prof. Pengjun Wan* (Illinois Institute of Technology, USA). MobiHoc 2008 received a near-record of 300 papers submissions, out of which 44 papers were accepted to make up the conference technical program, for an acceptance rate of 14.7%. The technical program for MobiHoc 2008 included a keynote talk by *Prof. Leandros Tassioulas* (University of Thessaly, Greece) entitled "Multihop

Wireless Networks: Capacity Limits and How to Approach Them." The program also included one half-day tutorial on May 27:

- Data Communication and Coordination in Wireless Sensor and Sensor-actuator Networks: *Prof. Ivan Stojmenovic* (University of Birmingham, UK)

Also on May 27, the MobiHoc 2008 program included three full-day workshops:

- FOWANC 2008: The First ACM International Workshop on Foundations of Wireless Ad Hoc and Sensor Networking and Computing
- MobilityModels 2008: The First ACM SIGMOBILE International Workshop on Mobility Models for Networking Research
- HeterSanet 2008: The First ACM International Workshop on Heterogeneous Sensor and Actor Networks

MobiSys 2008, *the 6th International Conference on Mobile Systems, Applications, and Services*, was held June 17-20, 2008, in Breckenridge, Colorado, USA. The MobiSys conference series 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.

The General Co-Chairs for MobiSys 2008 were *Prof. Dirk Grunwald* and *Prof. Richard Han* (University of Colorado, Boulder, USA), and the Program Co-Chairs were *Prof. Eyal de Lara* (University of Toronto, Canada) and *Prof. Carla Ellis* (Duke University, USA). MobiSys 2008 received 123 paper submissions, out of which 22 were accepted, for an acceptance rate of 17.9%. The technical program for MobiSys 2008 featured a keynote talk by *Dr. Roy Want* (Intel, USA) entitled "Life, the Universe, and the Future of Mobile Computing." The program also featured a Ph.D. Forum organized by Ph.D. students, for Ph.D. students, giving students the opportunity to present and discuss their dissertation research with people in the field and to get feedback on their research in a friendly and supporting environment from their Ph.D. peers, faculty, and industry representatives. In addition, the MobiSys 2008 program included 2 full-day workshops on June 17:

- HealthNet 2008: The Second International Workshop on Systems and Networking Support for Health Care and Assisted Living Environments
- MobiVirt 2008: The Workshop on Virtualization in Mobile Computing

The MobiSys 2008 program also featured 2 full-day tutorials on June 17:

- Thick Mobile Client Programming Technologies: Python for S60 and J2ME: *Dr. Vidya Setlur* and *Dr. Rich Hankins* (Nokia Research Center, USA)
- Vehicular Ad Hoc Networks: *Prof. Hannes Hartenstein* (University of Karlsruhe, Germany) and *Dr. Ken Laberteaux* (Toyota Technical Center, USA)

MobiSys 2009 will be held June 22-25, 2009, in Krakow, Poland.

SenSys 2007, *the 5th ACM Conference on Embedded Networked Sensor Systems*, was held November 6-9, 2007, in Sydney, Australia; this was the first time that the SenSys conference has been held outside the United States. The SenSys conference series 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 is co-sponsored by SIGMOBILE and SIGCOMM (30% each); and SIGARCH, SIGOPS, SIGMETRICS, and SIGBED (10% each).

The General Chair for SenSys 2007 was *Dr. Sanjay Jha* (University of New South Wales, Australia), and the Program Co-Chairs were *Dr. Phillip Gibbons* (Intel Research, USA) and *Dr. Akos Ledeczi* (Vanderbilt University, USA). SenSys 2007 received 149 paper submissions from authors in 21 different countries; 25 of these papers were accepted to be presented at the conference, for an acceptance rate of 16.8%. The technical program for SenSys 2007 featured a keynote talk by *Prof. Seth Goldstein* (Carnegie Mellon University, USA) entitled "On the Path Towards Programmable Matter." The program also included two full-day workshops on November 6:

- SenseID 2007: Convergence of RFID and Wireless Sensor Networks and Their Applications
- Sensing on Everyday Mobile Phones in Support of Participatory Research

In addition, the SenSys 2007 program included a Doctoral Colloquium, providing a friendly, supportive, and constructive atmosphere where Ph.D. students can present their research-in-progress for an open discussion, guided by a panel of experienced researchers and practitioners; each student was able to present an overview of their research topic followed by a discussion with a panel of experts.

SenSys 2008 will be held November 5-7, 2008, in Raleigh, North Carolina, USA.

HotMobile 2008, *the 9th Workshop on Mobile Computing Systems and Applications*, was held February 25-26, 2008, in Napa Valley, California, USA. The HotMobile (formerly known as

WMCSA) workshop series focuses on mobile applications, systems, and environments, as well as their underlying state-of-the-art technologies.

The General Chair for HotMobile 2008 was *Dr. Mirjana Spasojevic* (Nokia Research Palo Alto, USA), and the Program Chair was *Prof. Mark Corner* (University of Massachusetts, Amherst, USA). HotMobile 2008 received 79 paper submissions from authors in 23 different countries; 18 of these papers were accepted to be presented at the workshop, for an acceptance rate of 22.8%. The HotMobile 2008 technical program featured a keynote talk by *Dr. B.J. Fogg* (Stanford University, USA) entitled "The Mobile Miracle."

HotMobile 2009 will be held February 23-24, 2009, in Santa Cruz, California, USA.

Again this year, support for SIGMOBILE's conferences and workshops remains very high among leading-edge companies and organizations from around the world. Over this year, these supporters have included AARNet, ACoRN, Arch Rock, BBN Technologies, Bell Canada, City University of Hong Kong, CNR, Crossbow Technology, CSIRO, DaimlerChrysler, Google, Hong Kong Pei Hua Education Foundation, IBM Research, Intel, ISSNIP, MITACS, NICTA, Nokia, University of New South Wales, U.S. National Science Foundation, and WISE Society. We sincerely thank each of them for their generous financial contributions that have helped to make these conference and workshops a success.

In addition to SIGMOBILE's own conferences and workshops, SIGMOBILE was in-cooperation with 12 other conferences and workshops during this past year (July 2007 through June 2008):

- The Seventh International ACM Workshop on Data Engineering for Wireless and Mobile Access (MobiDE 2008), Vancouver, British Columbia, Canada, 13 June, 2008.
- COMPUTE 2008, Bangalore, India, 18-20 January, 2008.
- The Sixth International Conference on Mobile and Ubiquitous Multimedia (MUM 2007), Oulu, Finland, 12-14 December, 2007.
- The First International Conference on Autonomic Computing and Communication Systems, Rome, Italy, 28-30 October, 2007.
- The Third Annual International Wireless Internet Conference (WICON 2007), Austin, Texas, USA, 22-24 October, 2007.
- The Fourth IEEE International Conference on Mobile Ad-hoc and Sensor Systems (MASS 2007), Pisa, Italy, 8-11 October, 2007.
- The International Conference on Mobile Technology, Applications and Systems (Mobility 2007), Singapore, 12-14 September, 2007.
- The 9th International Conference on Human Computer Interaction with Mobile Devices and Services (MobileHCI 2007), Singapore, 11-14 September, 2007.
- The First International Conference on Robot Communication and Coordination (RoboComm 2007), Athens, Greece, 10-12 September, 2007.
- The 2nd ACM International Workshop on Mobility in the Evolving Internet Architecture (MobiArch 2007), Kyoto, Japan, 27 August, 2007.
- The 4th International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (QShine 2007), Vancouver, British Columbia, Canada, 14-17 August, 2007.
- The 4th Annual International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (Mobiquitous 2007), Philadelphia, Pennsylvania 6-10 August, 2007.

Events offered "in-cooperation with" SIGMOBILE allow SIGMOBILE 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.

IV. SIGMOBILE Publications

SIGMOBILE publishes *Mobile Computing and Communications Review* (MC2R), a peer-reviewed, quarterly journal/newsletter for SIGMOBILE members; others may also subscribe to MC2R, and MC2R is available in the ACM Digital Library.

This year, we have a new Editor-in-Chief for MC2R, *Prof. Srikanth Krishnamurthy* (University of California, Riverside, USA). The previous MC2R Editor-in-Chief, *Prof. Mani Srivastava* (University of California, Los Angeles, USA), stepped down after three years of excellent service at the end of 2007, and we thank him for his contributions.

MC2R's editorial support also includes Associate Editors *Prof. Lili Qiu* (University of Texas, Austin, USA) and *Prof. Sneha Kumar Kasera* (University of Utah, USA); Feature Editors *Dr. Ian Chakeres* (The Boeing Company, USA), reporting on activities in the IETF MANET Working Group, and *Prof. James C. Lin* (The University of Illinois at Chicago, USA), reporting on health aspects of wireless communication; plus 17 Area Editors, who are all experts in the field.

MC2R publishes articles that provide a healthy 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 from throughout the world, and other general news in the field.

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 currently about 17%. All aspects of the journal's operation are run entirely by volunteers, including assembly of final issue.

Also for SIGMOBILE members, SIGMOBILE publishes a monthly *E-Mail Newsletter*. This electronic newsletter was started three years ago and is edited by SIGMOBILE's Information Director *Dr. Robert Steele* (University of Technology, 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.

In addition, SIGMOBILE produces a large number of other publications, including proceedings for the large number of conferences and workshops sponsored by SIGMOBILE each year. These proceedings include those for the MobiCom, MobiHoc, MobiSys, and SenSys conferences; proceedings for each of the workshops co-located with our conferences; and proceedings for the HotMobile workshop now also sponsored by SIGMOBILE. As such, SIGMOBILE is a major contributor of content to the ACM Digital Library. We also strive to include in the ACM Digital Library the proceedings for each of the other conferences or workshops offered "in-cooperation with" SIGMOBILE each year.

Finally, 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.

V. SIGMOBILE Local Chapters

The following two Local Chapters of SIGMOBILE are currently chartered.

- *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.

Local Chapters provide a local focus to activities related to the area of SIGMOBILE, including mobile computing and wireless and mobile networking, and continue the work of SIGMOBILE 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/>.

VI. SIGMOBILE Membership

SIGMOBILE provides substantial benefits to our members, including:

- The quarterly journal and newsletter *Mobile Computing and Communications Review* (MC2R), serving 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.
- The 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 members informed of the latest happenings in our field, such as conference Calls for Papers.
- Qualification 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 four conferences each year (MobiCom, MobiHoc, MobiSys, and SenSys).
- 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, ability to automatically receive a CDROM after each of SIGMOBILE's four conferences, containing the full conference Proceedings.

In addition, SIGMOBILE provides additional benefits to the broader community served by SIGMOBILE:

- Organization and sponsorship of four annual conferences (MobiCom, MobiHoc, MobiSys, and SenSys).
- Promotion of emerging new areas through sponsorship of numerous workshops each year, now including the HotMobile workshop.
- A range of full-day and half-day tutorials at many SIGMOBILE conferences, offering attendees an easy way to broaden their knowledge.
- 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.
- Best Paper and other awards presented at our conferences and workshops.
- Support for students at SIGMOBILE conferences and workshops, including reduced registration fees, student travel awards for some conferences (e.g., with NSF support), and sessions of the ACM Student Research Competition (SRC).
- 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, and reviewer guidelines.

VII. SIGMOBILE Awards

The 2007 SIGMOBILE Outstanding Contribution Award was presented at MobiCom/MobiHoc 2007 to *Prof. David E. Culler*, with the citation: "*For developing the TinyOS platform which significantly advanced wireless sensor networking research and associated applications.*" Dr. Culler is a Professor of Computer Science at the University of California, Berkeley, USA. The Outstanding Contribution Award is given by SIGMOBILE to recognize an individual who has made a significant and lasting contribution to the research on mobile computing and communications and wireless networking; the contribution can be a single event or a lifetime of achievement.

Also at MobiCom/MobiHoc 2007, the winners of the ACM Student Research Competition (SRC) were:

- First Place: *Shravan Rayanchu* (University of Wisconsin, Madison, USA): "Deconstructing Wireless Errors: Collision or 'Bad' Channel?"
- Second Place (tie): *Mehedi Bakht* (University of Illinois at Urbana-Champaign, USA): "On the Feasibility of High-power Radios in Sensor Networks"; and *Yuan Yuan* (University of Maryland, College Park, USA): "UnChannelize the Channels in WLAN."
- Third Place: *Udayan Kumar* (University of Florida, Gainesville, USA): "Gender-based Feature Analysis in Campus-wide WLANs."

The MobiCom 2007 Best Student Paper Award was presented to *Han Cai* and *Prof. Do Young Eun* (North Carolina State University, USA) for their paper "Crossing Over the Bounded Domain: From Exponential to Power-law Inter-meeting Time in MANET." The MobiCom Best Student Paper Award is presented each year to the best paper with a student as the sole or primary author from among all papers submitted to the conference that year; the MobiCom Technical Program Committee forms the Selection Committee for this award.

The MobiHoc 2007 Best Paper Award was presented to *Vartika Bhandari* and *Prof. Nitin Vaidya* (University of Illinois at Urbana-Champaign, USA) for their paper "Capacity of Multi-channel Wireless Networks with Random (c,f) Assignment." The MobiHoc Best Paper Award is presented each year to the authors of the best paper from among all papers submitted to the conference that year; the MobiHoc Technical Program Committee forms the Selection Committee for this award.

Also at MobiCom/MobiHoc 2007, awards were given for the best student demos. In First Place was "Roomba MADNeT: A Mobile Ad-hoc Delay Tolerant Network Testbed," with student author *Joshua Reich* (Columbia University, USA), and with coauthors *Prof. Vishal Misra* and *Prof. Dan Rubenstein* (Columbia University, USA). In Second Place was "RBP: RSS-based Prediction of Carrier Sense and Interference in 802.11 Networks," with student authors *Jeongkeun Lee*, *Wonho Kim*, *Daehyung Jo*, and *Youngbin Im* (Seoul National University, Korea), and with coauthors *Prof. Taekyoung Kwon* and *Prof. Yanghee Choi* (Seoul National University, Korea) and *Dr. Sung-Ju Lee* (HP Labs); this demo also won a "popular vote" among attendees for the best demo.

For MobiHoc 2008, the Best Paper Award was presented to *Karthikeyan Sundaresan* and *Sampath Rangarajan* (NEC Labs America, USA) for their paper "On Exploiting Diversity and Spatial Reuse in Relay-enabled Wireless Networks."

The MobiSys 2008 Best Paper Award was presented to *Ben Greenstein* (Intel Research Seattle, USA), *Damon McCoy* (University of Colorado, USA), *Jeffrey Pang* (Carnegie Mellon University, USA), *Tadayoshi Kohno* (University of Washington, USA), *Srinivasan Seshan* (Carnegie Mellon University, USA), and *David Wetherall* (Intel Research Seattle and University of Washington, USA) for their paper "Improving Wireless Privacy with an Identifier-Free Link Layer Protocol." The MobiSys Best Paper Award is presented each year to the authors of the

best paper from among all papers submitted to the conference that year; the MobiSys Technical Program Committee forms the Selection Committee for this award.

The SenSys 2007 Best Paper Award was presented to *Branislav Kusy, Akos Ledeczí, and Xenofon Koutsoukos* (Vanderbilt University, USA) for their paper "Tracking Mobile Nodes Using RF Doppler Shifts." Also, the SenSys 2007 Best Talk Award was presented to *Mateusz Malinowski, Matthew Moskwa, Mark Feldmeier, Mathew Laibowitz, and Joseph Paradiso* (MIT, USA) for the presentation of their paper "CargoNet: A Low-Cost MicroPower Sensor Node Exploiting Quasi-Passive Wakeup for Adaptive Asynchronous Monitoring of Exceptional Events."

Finally, also at SenSys 2007, two Best Demo Awards were given: *Luca Mottola* (Politecnico di Milano, Italy) and *Gian Pietro Picco* (University of Trento, Italy) for their demonstration "Programming Wireless Sensor Networks with Logical Neighborhoods: A Road Tunnel Use Case"; and *Chunyi Peng, Guobin Shen, Zheng Han, Yongguang Zhang, Yanlin Li, and Kun Tan* (Microsoft Research Asia, China) for their demonstration "A BeepBeep Ranging System on Mobile Phones."

VIII. Future Challenges

After growing steadily for most of SIGMOBILE's history, our membership has been roughly unchanged, or even decreased slightly, over the past few years. Although this lack of growth is of concern, in the broader context this has been occurring at a time when the total membership of all SIGs and of most individual SIGs have also been decreasing. A significant part of the problem, we believe, is the difficulty in identifying to members the tangible benefits of membership. In particular, although the ACM Digital Library is a great resource for the community and has been a great source of income for the SIGs, it has also made things such as SIG-produced conference proceedings and SIG newsletters easily available to anyone, without needing to actually join the SIG. To address this problem, we are looking for additional ways to serve our members and to encourage the many researchers, practitioners, users, students, and others in the broader community to join SIGMOBILE.

IX. Summary

This has been another busy and productive year for SIGMOBILE. Our SIG is vibrant and healthy, with well respected, well attended and supported conferences and workshops, and with a highly selective journal/newsletter for our members, *Mobile Computing and Communications Review* (MC2R). SIGMOBILE members are active in shaping the future of mobile computing, mobile and wireless networking, and related fields, and we look forward to continuing and expanding the future activities and successes of SIGMOBILE together.

