General Chairs' Welcome Message

New York City with its surrounding area is a long-term hub of the wireless networking industry and an architectural marvel which offers plenty of diversions for tourists. It is our great pleasure to welcome you to the Big Apple and to the 22nd Annual International Conference on Mobile Computing and Networking – MobiCom'16. The MobiCom conference series serves as a highly selective, premier international forum addressing networks, systems, algorithms, and applications that support mobile computers and wireless networks.

This year we feature an exciting program full of innovative ideas and thought leadership. We are looking forward to the keynote given by Craig Graham Nevill-Manning, the CTO of Sidewalk Labs. Prior to that, he founded Google's first remote engineering center, located in midtown Manhattan, and served as an Engineering Director. He also invented Froogle (now Google Shopping), a product search engine. In celebration of the inaugural SIGMOBILE Test-of-Time awards, we also included a special half-day session in the main conference program. The authors of each award paper have been invited to give a 10-minute presentation followed by panel-style discussions and Q&A sessions. The event will culminate in a forward-looking panel on the future of mobile and wireless systems. Further, it is our pleasure to host the Rockstar Award Talk, which happens to be given by one of the program chairs, Karthik Sundaresan (RockStar award recipients are chosen by an independent SIGMOBILE award committee). In addition to the regular conference program, MobiCom'16 will include a set of workshops, panels, research demonstrations, and a poster session that includes the ACM Student Research Competition. This year again, MobiCom hosts the mobile app competition successfully introduced two years ago.

Putting together MobiCom'16 has been a team effort. We would first like to thank the authors for submitting their best work and providing the core content of the program in terms of papers, demos and posters. We are also grateful to the organizing committee and its dedication in making MobiCom'16 a success. Y. Charlie Hu and Karthik Sundaresan, as program chairs, have assembled and overseen a world-class program committee for soliciting, reviewing, and selecting the main track papers. Ashwin Ashok and Robin Kravets have attracted, selected, and organized resources for thought-provoking workshops. Ramya Raghavendra and Tam Vu, as poster chairs, as well as Carla-Fabiana Chiasserini and Fan Ye, as demo chairs, have organized a poster/demo session full of exciting and diverse early-stage research advances. Aakanksha Chowdhery and Shubham Jain have put together an oustanding Student Research Competition. Building on the success of the mobile app competition, Xinyu Zhang and Lakshminarayanan Subramanian have overseen a terrific competition process. Moreover, Qin Lv has expertly handled proceeding production with less professional assistance than in the past. Francesco Bronzino has smoothly processed what is shaping up to be a record number of registrations. Hongbo Liu has tirelessly created conference revenue and expense predictions. Falko Dressler, Wenjun Hu, and Xinbing Wang have widely publicized MobiCom. Puneet Jain has been the master of the conference website. Ana Aguiar and Yan Wang have acquired student travel grants funds and carefully selected awardees. Robert LiKamWa has filled the conference with fun social activities, and Youngki Lee (together with Rajesh Balan and team) has adapted a fantastic conference app for MobiCom. A special thank you also goes to Shweta Jain and Justin Manweiler for wonderful local arrangements that looked especially complex in New York City. In summary, we had an excellent organizing team working tirelessly for almost one year to make MobiCom'16 a success.

Now we cannot forget to thank our sponsor, ACM SIGMOBILE, as well as our generous government and corporate conference supporters: the National Science Foundation (student travel grants), Qualcomm and Huawei (Gold), Hewlett Packard Enterprise, AT&T and Intel (Silver). Additional support was provided by Microsoft Research, Google, NEC, Nokia Bell Labs, and HIPR. Their sponsorship and support are vital to the successful organization of this conference.

Being a General Chair of MobiCom is an amazing honor and it also comes with great responsibility. We have obtained great support not only from the organizing committee, but also from Victor Bahl, the steering committee chair, Suman Banerjee, the SIGMOBILE chair, and April Mosqus together with the rest of the ACM staff. We thank them sincerely.

Finally, we wish you all an enjoyable stay in New York City, and a memorable and thought-provoking MobiCom'16.

Marco Gruteser
General Co-Chair
Rutgers University

Yingying Chen
General Co-Chair
Stevens Institute of Technology

Technical Program Committee Chairs' Message

Welcome to ACM MobiCom'16, the 22nd Annual International Conference on Mobile Computing and Networking! MobiCom is the premier forum for presenting cutting-edge research in mobile systems and wireless networks. The technical program this year features 31 outstanding papers that cover a wide variety of topics including mobile sensing, security and privacy, wireless access and backhaul, applications, network architecture and measurement, and localization.

This year's call for papers attracted a record number of 344 abstract registrations out of which 226 turned into qualified submissions from Asia, Europe, Australia, Middle East and United States. This year for the first time we experimented with a heavy PC (31 members) and a light PC (27 members). The motivation for having a two-tiered PC is to balance broadening of the PC to be more inclusive of the community and running an effective TPC meeting. The TPC was formed to cover diverse research expertise while taking into account factors such as gender, seniority, institution, country, and expertise. The TPC included researchers from 9 countries including China, France, Germany, Singapore, South Korea, Sweden, Switzerland, UK, and USA, and 21% of the members were female. The TPC also had broad industry participation with members from Alcatel Lucent, AT&T, Google, HP, Intel, Microsoft, NEC, and UBER.

The paper review process was double-blinded and carried out in three phases. In the first phase, each paper was reviewed by at least three TPC members, and the top 111 papers were advanced to the second phase. In addition to review scores, reviewer confidence and normalization with respect to other papers by the same reviewer were considered in the selection process. In the second phase, each paper was reviewed by at least two more reviewers followed by an online discussion, producing 58 papers for the final phase. The TPC meeting was held on June 6th and 7th in Hoboken, New Jersey. These 58 papers were grouped by their topic areas, and discussed at length at the meeting, in random order within each group. Eventually, 31 papers were conditionally accepted in the program. As the final step, each of the 31 papers was assigned a shepherd from the heavy PC and shepherded in a "blind" process where the authors interacted with all the reviewers and the shepherd to address the review comments without knowing the identifies of the reviewers or the shepherd. The final outcome is an exciting technical program consisting of 31 high quality papers.

During the review process, Thyagarajan Nandagopa1, the TPC Co-Chair of MobiCom'11, handled the papers that were co-authored by TPC chairs and those that had conflict-of-interest with both TPC chairs. To ensure fairness and preserve the anonymity of all authors and reviewers, the assignment of reviewers, the reviews and discussions of these papers were done out of band without any exposure to the TPC chairs.

As TPC Co-Chairs, we would like to express our sincere gratitude to all the individuals who made this technical program possible. We thank all the authors who submitted their great research work to the conference. We are grateful to all the TPC members – their enthusiasm and hardwork produced the strong technical program. We also thank the entire MobiCom'16 team, especially General Chairs Marco Gruteser and Yingying Chen, and Publication Chair Qin lv, for their tremendous support and behind-the-scenes effort. We especially thank Yingying Chen for hosting the TPC meeting at the Stevens Institute of Technology campus. Finally, we extend our thanks and appreciation to the MobiCom Steering Committee for their guidance and wisdom.

We hope that you will find the program interesting and thought-provoking!

Y. Charlie Hu
Technical Program Co-Chair
Purdue University, USA

Karthik Sundaresan
Technical Program Co-Chair
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