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SenSys'15

Proceedings of the 13th ACM Conference on
Embedded Networked Sensor Systems

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General Chair's Welcome Message

On behalf of the organizing committee, it is my great pleasure to welcome you to the 13th ACM Conference on Embedded Networked Sensor Systems (SenSys 2015) in Seoul, Korea. This is the first time that the SenSys comes to Asia. Also, SenSys 2015 continues to be co-located with the ACM International Conference on Embedded Systems for Energy-Efficient Built Environments (BuildSys), to take place on November 4th and 5th following last year's success.

SenSys is a leading venue for publication and presentation of research results on systems issues in the area of embedded, networked sensors and sensor-enabled smart systems. This year's program has selected 27 exciting papers embracing a number of perspectives including energy, localization, systems, networking, information services and object/activity recognition. In addition to the regular full paper sessions, this year also sees a significantly expanded adjunct program, 26 demos and 34 posters. The workshop program has four workshops covering exciting topics in energy harvesting and energy-neutral sensing systems, context sensing and activity recognition, Internet of Things toward applications, real world wireless sensor networks. It also includes a Ph.D. Forum that provides a supportive environment for doctoral students to discuss their dissertation work. Last but not least, SenSys 2015 hosts two exciting keynote speakers: Professor Raj Rajkumar from CMU will provide a stimulating view on the challenges and opportunities of self-driving vehicles, and Dr. Hendrik F. Hamann from IBM will give an exciting talk on smarter solutions and physical analytics.

Putting together SenSys 2015 has been a huge team effort. I would like to thank many people for their tireless work, including the Local Arrangement Chairs JeongGil Ko, Jeongyeop Paek, and Jeonghoon Kang, Publicity Chairs Prabal Dutta, Koen Langendoen, and Insik Shin, Finance Chairs Sung-Ju Lee and Uichin Lee, Social Media Chair Eric Rozner, Registration Chair Sourav Kumar Dandapat, PC Local Organizer Niki Trigoni, Web administrators Chiwoo Cho and Sangwon Choi. A special thanks goes to the Student Travel Grants Chairs Young-Bae Ko, Raghu K. Ganti, and Taiwoo Park for the hard work acquiring funds and making it possible for dozens of students to come to SenSys 2015. I would like to acknowledge the tremendous efforts of the Technical Program Committee, including the chairs Cecilia Mascolo and Tarek Abdelzaher in particular, for making an outstanding technical program. In addition, I would like to thank Poster and Demo Chairs Rajesh Krishna BALAN, Inseok Hwang, and Seungwoo Kang, Doctoral Colloquium Chairs Nicholas Lane and Taiwoo Park, Workshop Chairs Marco Gruteser and Youngki Lee. A deep thanks goes to our Publication Chair Qin (Christine) Lv for managing and compiling all the details of the proceedings. I would like to thank Jie Liu and Kamin Whitehouse, the former and current Steering Committee Chairs. They have been very supportive in putting the conference together. Finally, I would like to express my deep gratitude to the sponsors of SenSys 2015.

I sincerely hope that this year's conference will provide you with a valuable opportunity to share ideas and experiences with researchers and practitioners from institutions around the world, and you will find it interesting, useful and enjoyable.

Junehwa Song
SenSys 2015 General Chair
Korea Advanced Institute of Science and Technology
South Korea

Program Co-Chairs' Welcome Message

It is our great pleasure to welcome you to the 13th ACM Conference on Embedded Networked Sensor Systems (SenSys 2015). We hope you enjoy this conference that attracts a diverse set of attendees from both academia and industry and is a leading venue for publications and idea exchange on networked sensing. SenSys this year introduces a highly selective, single-track program featuring systems issues of sensors and sensor-enabled smart systems, broadly defined. It provides an ideal venue to address research challenges facing the design, development, deployment, use, and fundamental limits of these systems.

The paper review process this year was highly selective. Out of 132 high quality submissions, only 27 were accepted for publication and presentation as full papers, yielding an acceptance rate around 20.45%. Submitted papers underwent a rigorous multistage review process. First, all submissions were checked for compliance and for general quality and topic match. Those not meeting conference criteria were administratively rejected without review. Papers surviving this stage were assigned three reviews in the first stage of the peer review process. At the conclusion of this stage, those papers that none of the reviewers recommended acceptance were rejected. The rest were assigned two additional reviews, thus totaling 5 reviews per paper. An online discussion phase then ensued, resulting in recommending 59 papers for discussion at the in-person physical PC meeting. At the conclusion of the PC meeting, a total of 27 papers were recommended for acceptance to the conference. All recommended papers were assigned shepherds to help ensure that the authors produce a final manuscript that satisfactorily addresses reviewer comments. All shepherded papers were ultimately accepted to the conference.

Our program this year covers an exciting set of topics including energy, localization, systems, networking, information services and object/activity recognition. It also includes a poster/demo session, a panel, and two distinguished keynote speakers: Professor Raj Rajkumar from CMU, and Dr. Hendrik Hamann from IBM Research.

Putting together the program of Sensys 2015 was a team effort. We would like to express our deepest gratitude to Prof. Junehwa Song, the General Chair, for organizing the team. We would also like to thank the authors for providing stellar contributions. We would like to express special thanks to the program committee members and shepherds who worked very hard in reviewing papers and providing suggestions for their improvement. We would also like to thank ACM and the other members of the organizing committee for all the logistical arrangements that made it possible to bring this program to the attendees. Last but not least, we would like to thank the attendees for your patronage of the conference and for making it a successful meeting place for multiple communities and a catalyst for discussions and creative exchange.

We hope that you will find this program interesting and thought-provoking and that the conference will provide you with a valuable opportunity to share ideas with other researchers and practitioners from institutions around the world.

Cecilia Mascolo
SenSys 2015 Program Co-Chairs
University of Cambridge, UK

Tarek Abdelzaher
SenSys 2015 Program Co-Chairs
University of Illinois at Urbana-Champaign, USA

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