IoT Day

part of CODES+ISSS 2016

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Call for Papers

Internet of Things: A Holistic Perspective

Abstract submission:
April 1, 2016

Full paper submission:
April 8, 2016 (Firm deadline)

Conference:
October 2-7, 2016

Venue:
Pittsburgh Marriott City Center

Advances in ubiquitous computing networking, and embedded systems have recently led to a vision of a future Internet that connects a diverse set of physical entities, ranging from commonplace household appliances to smart city Infrastructure, as opposed to exclusively connecting computing devices and people. This Internet, called the *Internet of Things*, brings about challenges in several research areas including cyber-physical systems, networked sensing, wireless networking, and cloud computing. The IoT Day is designed as a meeting point for researchers in the diverse areas brought together by these new Internet visions, with the purpose of exchanging examples of relevant domain challenges and identifying new and exciting interdisciplinary research directions via a combination of contributed and invited papers, talks and panels.

The event invites original, previously unpublished work, describing underlying foundations, system design, challenges problems, and deployment experiences related to IoT. Topic include but are not limited to:

- Applications and drivers for the Internet of Things
  - Smart city applications and systems
  - Healthcare
  - Intelligent transportation
  - Energy and sustainability
  - Disaster response systems
- Novel quality requirements and enforcement mechanisms
  - Software correctness and timeliness
  - Quality of information requirements
  - Data reliability in crowd-sensing systems
  - Decision support
- Cloud back-ends and resource management for IoT applications
  - Reliability, security, timeliness, and robustness considerations in IoT systems
  - Data streaming architectures and back-end issues
- Industrial deployment experiences, embedded challenges, case studies, and lessons learned
  - IoT-motivated cyber-physical, Industrial Internet, and/or embedded system challenges
  - Sensing, control, and actuation in IoT architectures
  - Evaluation and testbeds
- Analytic foundations and theory of the Internet of Things
- Social computing and human-in-the-loop issues

Paper Process: This year ESWeek will introduce a two-stage review process in order to further increase quality. Papers passing the first stage need to revise their work within a short time frame of around two weeks. Further details will be published at least two months before the submission deadline. Like always, all accepted papers come with a talk and a poster presentation. Each accepted paper requires one full conference registration.

ESWeek General Chairs:
Jörg Henkel, KIT Karlsruhe
Lothar Thiele, ETH Zürich

IoT Day Program Chairs:
Tarek Abdelzaher, University of Illinois, USA
Jeff Kephart, IBM Research, USA