The 12th ACM/IEEE Conference on
Information Processing in Sensor Networks
April 8-11, 2013   Philadelphia, USA

IPSN 2013

http://ipsn.acm.org

The International Conference on Information Processing in Sensor Networks (IPSN) is a leading, single-track, annual forum on research in wireless, embedded, and networked sensing systems. IPSN brings together researchers from academia, industry, and government to present and discuss recent advances in both theoretical and experimental research. Its scope includes signal and image processing, information and coding theory, databases and information management, distributed algorithms, networks and protocols, wireless communications, collaborative objects and the Internet of Things, machine learning, mobile and social sensing, and embedded systems design. Of special interest are contributions at the confluence of a multiple of these areas.

The conference features two interleaved tracks, the Information Processing (IP) track, and the Sensor Platforms, Tools and Design Methods (SPOTS) track. Authors should carefully review the intended foci of these two tracks to decide which track is better suited for their work, and they are encouraged to contact the program chairs with questions or clarifications. As an example of these different emphases, results focused on the analysis and processing aspects of data collected from deployments should be submitted to the IP track, while studies on the hardware and software platforms and tools used for deployment should be submitted to the SPOTS track

The **IP track** focuses on algorithms, theory, and systems for information processing using networks of embedded, human-operated, or social sensors.
Topics covered in the IP track include, but are not limited to:
- Innovative applications and deployment experiences
- Mobile, participatory, and social sensing
- Coding, compression and information theory
- Data processing, storage and management
- Detection, classification, and tracking
- Distributed algorithms and reasoning
- Distributed and collaborative signal processing
- Fundamental bounds and formulations
- Location, time, and other network services
- Sensor tasking, control, and actuation
- Network protocols
- Programming models and languages

The **SPOTS track** focuses on new hardware and software architectures, modeling, evaluation, deployment experiences, design methods, implementations, and tools for networked embedded sensor systems. Submissions are expected to refer to specific hardware, software, and implementations. Topics covered in the SPOTS track include, but are not limited to:
- Novel sensor network components, device platforms and architectures
- Embedded software for sensor networks
- Design tools and methodologies for sensor networks
- System modeling, simulation, measurements, analysis
- Case studies that describe experiences, highlight challenges, and study/compare the performance of platforms and tools
- Network health monitoring and management
- Operating systems and runtime environments
- Innovative sensing platforms including crowd sourcing
- User interfaces for sensing applications and systems

IMPORTANT DEADLINES
Abstract deadline: October 8, 2012, 23:59 GMT -12
Full papers due: October 15, 2012, 23:59 GMT -12
Author notification: January 25, 2013
Camera-ready papers: February 18, 2013

ORGANIZERS
General Chair: Tarek Abdelzaher, UIUC
TPC Co-Chair (IP Track): Kay Römer, University of Lübeck
TPC Co-Chair (SPOTS Track): Raj Rajkumar, CMU
Steering Committee Chair: Feng Zhao, MSR Asia