



The 15th ACM/IEEE International Conference on Information Networks
IPSN Call for Papers

The International Conference on Information Processing in Sensor Networks (IPSN) is a leading, single-track, annual forum on research in networked sensing and control, broadly defined. 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.

In addition to regular research papers, in IPSN 2015, we also encourage submissions of Challenge Papers that lay out visions and future challenges in the field of information processing in sensor networks. Challenge papers are up to 6 page long and the title should start with "Challenge: ..." These submissions are reviewed based on the novelty of the concepts and potential of impacting the field.

The conference features two submission focus areas: one on Information Processing (IP), and one on Sensor Platforms, Tools and Design Methods (SPOTS). The entire program committee is eligible to review both focus areas, but authors are encouraged to make indications in the submission site accordingly to aid in reviewer selection.

The **IP area** focuses on algorithms, theory, and systems for information processing using networks of embedded, human-in-the-loop, or social sensors. Topics covered in the IP area include, but are not limited to:

- Sensor data processing, mining, and machine learning
- Data storage, management, and retrieval
- Coding, compression and information theory
- Detection, classification, tracking, reasoning, and decision making
- Sensor tasking, control, and actuation
- Theoretical foundation and fundamental bounds
- Network and system architectures and protocols
- Location, time, and other network services
- Programming models and languages
- Mobile, participatory, and social sensing
- Innovative applications and deployment experiences

Key Dates

Abstract registration: October 13, 2014

Submission deadline: October 20, 2014

Paper notification: January 17, 2015

Submission

Formatting guidelines for regular and challenge papers are available [here](#).

The **SPOTS area** 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 SPOTS include, but are not limited to:

- Novel components, devices and architectures for networked sensing
- Innovative sensing and processing platforms including cloud, crowd, and Internet-of-Things
- Embedded software for sensor networks
- System modeling, simulation, measurements, and analysis
- Design tools and methodologies for sensor networks
- Network health monitoring and management
- Operating systems and runtime environments
- User interfaces for sensing applications and systems
- Case studies highlighting experiences, challenges, and comparisons of platforms and tools

Organizers

General Chair: Suman Nath, MSR

TPC Co-Chair (IP): Bhaskar Krishnamachari, USC

TPC Co-Chair (SPOTS): Anthony Rowe, CMU

Steering Committee Chair: Feng Zhao, MSR Asia