



Call for Papers



IPSN'09: The 8th International Conference on Information Processing in Sensor Networks

April 13-16, 2009, San Francisco, California, USA

Co-located with IEEE Real Time and Embedded Technology and Applications Symposium (RTAS '09) and Hybrid Systems: Computation and Control (HSCC '09)

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Akos Ledeczi (Vanderbilt)

Philip Levis (Stanford)

SPOTS Track Co-Chairs:

Peter Corke (CSIRO)

Koen Langendoen (TU Delft)

Poster Chair:

Andreas Terzis (Johns Hopkins University)

Jan Beutel (ETH Zurich)

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Kamin Whitehouse (University of Virginia)

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Local Arrangements: Hamid Aghajan (Stanford),

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SPOTS Track TPC: Andreas Andreou (Johns Hopkins), Jan Beutel (ETH Zurich), Rachel Cardell-Oliver (U Western Australia), Peter Corke (CSIRO), Stefan Dulman (UTwente), Adam Dunkels (Swedish Inst. CS), Ben Greenstein (Intel), Ralph Kling (Crossbow), Koen Langendoen (TU Delft), Pedro Marron (U Bonn), Joe Polastre (Sentilla), Bodhi Priyantha (Microsoft Research), Jochen Schiller (Freie Universitaet Berlin), Mani Srivastava (UCLA), Kamin Whitehouse (U Virginia), Feng Zhao (Microsoft Research)

The International Conference on Information Processing in Sensor Networks (IPSN) is a leading, single-track, annual forum on sensor network research. 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, machine learning, and embedded systems design.

The conference features two interleaved tracks, the Information Processing (IP) track, and the Sensor Platforms, Tools and Design Methods (SPOTS) track. The two tracks have separate program committees to evaluate their submissions. 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.

The Information Processing (IP) track focuses on algorithms, systems, and theory for information processing using networks of embedded sensors. Topics covered in this track include, but are not limited to:

- Applications and deployment experiences
- Coding, compression and information theory
- Data processing, storage and management
- Detection, classification, estimation, tracking
- Distributed algorithms and reasoning
- Distributed and collaborative signal processing
- Fault tolerance and identification
- Fundamental bounds and formulations
- Location, time and other network services
- Operating systems and runtime environments
- Network health monitoring and management
- Network protocols
- Programming models and languages
- Real-time scheduling
- Security
- Sensor tasking, control, and actuation
- Simulation

The Sensor Platforms, Tools, and Design Methods (SPOTS) track focuses on networked embedded sensor platforms and tools. Submissions are expected to refer to specific hardware, software, and implementations. The SPOTS track focuses on new architectures, modeling, evaluation, design methods, implementations, tools, or deployment experiences. Results focused on the analysis and processing aspects of data collected from deployments should be submitted to the IP track, while details on the platforms and tools used in the deployment should be submitted to SPOTS. Topics covered in the SPOTS track include, but are not limited to:

- Case studies that describe experiences, highlight challenges, and study/compare the performance of platforms and tools
- Novel sensor network components, device platforms and architectures
- Embedded software for sensor networks
- Design tools and methodologies for sensor networks
- System modeling, simulation, measurements, and analysis

Submission Guidelines

All papers must be submitted electronically, in Portable Document Format (PDF). Instructions for submission will be available at the IPSN'09 website: <http://ipsn.acm.org/2009/>. Submissions must meet the following criteria:

- A paper must be original material that has neither been previously published nor is currently under review by another conference or journal.
- Submitted papers should be no longer than 12 pages in ACM 10-point, two-column conference format.

The program committee of each track is independently responsible for reviewing its papers, and all accepted papers will appear in the conference proceedings. Unlike previous IPSN conferences, all accepted papers will be presented orally at the conference. There will be a separate call for posters.

Important Dates:

Abstract Due: October 15, 2008

Paper Due: October 22, 2008

Conference: April 13-16, 2009

<http://ipsn.acm.org>