INVITED SPEAKERS

KEYNOTE SPEAKERS

High-precision Indoor Positioning Systems - Challenges and Research Directions  
Niki Trigoni

Sensors and Machine-to-Machine Technologies for Smarter Cities  
Mischa Dohler

Sensor Networks, Ubiquitous Computing, and Information Fusion – An Overview of the Triad  
Underlying Emerging Information Networks  
Belur V. Dasarathy

Wireless Sensor Networks for Home Health Care  
John Stankovic

A Perspective of the Networks of the Future and Smart Cities  
Luis M. Correia

INVITED TALK

Pervasive Sensing and Computing for Healthcare Applications  
Octavian Postolache

SENSOR NETWORKS SOFTWARE AND ARCHITECTURES

FULL PAPERS

Secure UHF Tags with Strong Cryptography - Development of ISO/IEC 18000-63 Compatible  
Secure RFID Tags and Presentation of First Results  
Walter Hinz, Klaus Finkenzeller and Martin Seysen

Multi-protocol Scheduling for Service Provision in WSN  
Michael Breza, Shusen Yang and Julie McCann

Optimizing QoS in Wireless Sensors Networks using a Caching Platform  
Rémy Léone, Paolo Medagliani and Jérémie Leguay

SHORT PAPERS

STaR: Security Transparency and Reconfigurability for Wireless Sensor Networks Programming  
Roberta Daidone, Gianluca Dini and Marco Tiloca

Design of an Intelligent Middleware for Flexible Sensor Configuration in M2M Systems  
Niels Reijers, Kwei-Jay Lin, Yu-Chung Wang, Chi-Sheng Shih and Jane Y. Hsu

Platform-integrated Sensors and Personalized Sensing in Smart Buildings  
Milan Milenkovic, Thanh Dang, Ulf Hanebutte and Yonghong Huang

Plug-configure-Play Service-oriented Gateway - For Fast and Easy Sensor Network Application Development  
Lin Wu, Yongjun Xu, ChaoNong Xu and Fei Wang
Accurate Online Estimation of Battery Lifetime for Wireless Sensors Network
Emmanuel Nataf and Olivier Festor

A Data Logger for Wireless Sensor Network
Giuseppe Amato, Stefano Chessa, Claudio Gennaro, Daniele Pallini and Claudio Vairo

POSTERS

IT Lessons Learnt from Real Time Dike Monitoring
Matthijs Vonder and Bram van der Waaïj

A Smartphone-based Posture Measurement System for Physical Therapy Applications - Synchronization of Multiple Devices via Bluetooth Network
Noriaki Ikeda, Kai Ishida, Yoshitaka Shiba, Kousuke Mizuno, Noritaka Mamarita and Akihiro Takeuchi

The Wireless Sensor Network and Local Computational Unit in the Neighbourhood Area Network of the Smart Grid
Zoya Pourmirza and John M. Brooke

UML Modelling of Design Patterns for Wireless Sensor Networks
John K. Jacoub, Ramiro Liscano, Jeremy S. Bradbury and Jared Fisher

WIRELESS INFORMATION NETWORKS

FULL PAPER

On the Pitfalls of Desynchronization in Multi-hop Topologies
Clemens Mählberger

SHORT PAPERS

Adaptive Active Period Control for Low Power Consumption and Low Latency in Multi-hop Wireless Sensor Networks
Narumi Kai, Shiro Sakata and Nobuyoshi Komuro

Self-stabilizing TDMA Algorithms for Dynamic Wireless Ad-hoc Networks
Pierre Leone and Elad M. Schiller

Intelectus - Intelligent Sensor Motes in Wireless Sensor Network
Tiziana Campana and Gregory M. P. O’Hare

Fault-tolerant Coverage in Dense Wireless Sensor Networks
Akshaye Dhawan and Magdalena Parks

POSTERS

Energy Performance of High Data Rate and Low Power Transceiver based Wireless Body Area Networks
Nanhao Zhu and Ian O’Connor

Energy-based Metric for the Routing Protocol in Low-power and Lossy Network
Patrick Olivier Kamgueu, Emmanuel Nataf, Thomas Djotio and Olivier Festor
DATA MANIPULATION

FULL PAPERS

Resonant Acoustic Sensor System for the Wireless Monitoring of Injection Moulding
F. Müller, P. O'Leary, G. Rath, C. Kukla, M. Harker, T. Lucyshyn and C. Holzer

Semi-quantitative Monitoring of VOCs Emission Decay based on Gas Sensor Array and Graphical Display
Andrzej Szczurek and Monika Maciejewska

POSTER

Inertial Navigation System for Emergency Responders - A Foot Mounted Dead Reckoning System
Thies Keulen

SIGNAL PROCESSING

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An Algorithm for Extended Dynamic Range Video in Embedded Systems
Alberto Ferrante, Massimo Chelodi, Francesco Bruschi and Valeria Mozzetti

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Evaluation of RSS-based Position Tracking using WSNs for Resource Localization in an Indoor Construction Environment
Meimanat Soleimanifar, Ming Lu, Ioannis Nikolaidis and Xuesong Shen

OBSTACLES

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A Near Optimal Algorithm for Lifetime Optimization in Wireless Sensor Networks
Karine Deschinkel and Mourad Hakem

POSTER

A Neural Network and Post-processing for Estimating the Values of Error Data
Jihoon Lee, Yousok Kim, Se-Woon Choi and Hyo-Seon Park

APPLICATIONS AND USES

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Inverse Modeling using a Wireless Sensor Network (WSN) for Personalized Daylight Harvesting
Ryan Paulson, Chandrayee Basu, Alice M. Agogino and Scott Poll

Landfill Gas Monitoring Network - Development of Wireless Sensor Network Platforms
Fiachra Collins, Dylan Orpen, Eoghan McNamara, Cormac Fay and Dermot Diamond
Posters

Design of a Real-time Crowdsourced Mobility Sensor for Public Transportation Networks
Marc Pous, Daniel Villatoro, F. Xavier Mercadal and Arol Viñolas

AAL-Oriented TOF Sensor Network for Indoor Monitoring
Giovanni Diraco, Alessandro Leone and Pietro Siciliano

Mid Sweden University - A Survey of Wireless Sensor Networks for Home Healthcare Monitoring Application
Jun Tang and Tingting Zhang

Possible Uses for Animal Tracking and Sensor Data
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