

# Table of Contents

## Poster Abstracts

Bayesian Localization in Randomized Wireless Sensor Networks . . . . .	2
<i>Henrik Schiøler, Martin B. Hansen, Hans Peter Schwefel</i>	
An Embedded GPRS Gateway for Environmental Monitoring Wireless Sensor Networks . . . . .	4
<i>Francesco Chiti, Michele Ciabatti, Giovanni Collodi, Davide Di Palma, Antonio Manes</i>	
Pilot Experiment of an Early Warning Fire Detection System . . . . .	6
<i>Gil Manuel Gonçalves, Alexandre Sousa, José Pinto, Paulo Lebres, João Sousa</i>	
Sensor Fusion in Multirobot Workcell Using Sensor Networks . . . . .	8
<i>Mikko Sallinen, Tapio Heikkilä</i>	
Power-Efficient Distributed Support Vector Machines for Wireless Sensor Networks . . . . .	10
<i>K. Flouri, B. Beferull-Lozano, P. Tsakalides</i>	
A Theoretical Analysis of Routing Protocols in Wireless Sensor Networks . . . .	12
<i>Juan José Vinagre, Antonio J. Caamaño, Javier Ramos, Eduardo Morgado Reyes</i>	
Wireless Sensor Networks in Agricultural Applications (Field Studies) . . . . .	14
<i>Alexander Coers, Markus Holzappel, Hans-Christian Müller</i>	
Introducing Logical Neighborhoods for Programming Wireless Sensor and Actor Networks . . . . .	16
<i>Luca Mottola, Gian Pietro Picco</i>	
Efficient Decision Fusion with Performance Guarantees in Sensor Networks . . .	18
<i>Zinaida Benenson, Gernot Fabeck</i>	
A Lifetime-Efficient Forwarding Strategy for Wireless Sensor Networks . . . . .	20
<i>Marcel Busse, Thomas Haenselmann, Wolfgang Effelsberg</i>	
Modular Communication Protocols for Sensor Networks . . . . .	22
<i>Olaf Landsiedel, Jó Ágila Bitsch, Katharina Denking, Klaus Wehrle</i>	
Monitoring Indoor Temperature and Humidity for Pig Stables . . . . .	24
<i>Jens A. Hansen, Thomas D. Nielsen, Henrik Schiøler</i>	
A PIR based wireless sensor node prototype for surveillance applications . . . . .	26
<i>Piero Zappi, Elisabetta Farella, Luca Benini</i>	

Sensor Networks for Corrosion Monitoring . . . . .	28
<i>Adrian Hozoi, Zoltan Papp, Peter van der Mark</i>	
Security and Advanced Control Issues in a Robotic Platform for Monitoring and Relief . . . . .	30
<i>Antonio Danesi, Ida M. Savino, Riccardo Schiavi, Antonio Bicchi, Gianluca Dini</i>	
Experimental Localization Results in an Indoor Wireless Sensor Network Testbed . . . . .	32
<i>Sebastian Blom, Matteo Andretto, Andrea Zanella, Michele Zorzi, Simone Friso, Riccardo Crepaldi</i>	
A Complete Energy Model for Wireless Sensor Networks . . . . .	34
<i>Lasse Öberg, Youzhi Xu</i>	
Receiver Oriented Trajectory Based Forwarding . . . . .	36
<i>A. Capone, M. Cesana, I. Filippini, L. Fratta, L. Pizziniaco</i>	
Architecture of a scalable wireless sensor network for pollution monitoring . . .	38
<i>Karl Baumgartner, Stephan Robert</i>	
Energy Efficient Area Coverage in Arbitrary Sensor Networks . . . . .	40
<i>Markos Sigalas, George Vouros</i>	
Toward Adaptive Wireless Sensor Networks . . . . .	42
<i>Silvia Santini</i>	
Interfacing the Real World with Ubiquitous Gateways . . . . .	44
<i>Christian Frank, Christoph Roduner, Chie Noda, Marco Sgroi, Wolfgang Kellerer</i>	
<b>Demonstration Abstracts</b>	
Concealed Data Aggregation for WSNs . . . . .	48
<i>Joao Girao, Dirk Westhoff</i>	
Low-Power Multihop Sensor Networking using WiseMAC . . . . .	50
<i>Amre El-Hoiydi, Jean-Dominique Decotignie</i>	
Building Adaptable Sensor Networks with Sensor Cubes . . . . .	52
<i>H. Diall, K. Raja, I. Daskalopoulos, S. Hailes, T. Torfs, C. Van Hoof, G. Roussos</i>	
Energy Management in Buildings with Sensor Networks . . . . .	54
<i>David Garcés, Albert Krohn, Odilo Schoch</i>	
NemoTrack: A RF-Based Robot Tracking System in Wireless Sensor Networks	56
<i>Xingfa Shen, Hongbin Li, Jun Zhao, Jiming Chen, Zhi Wang, Youxian Sun</i>	
Sensor Network Maintenance Toolkit . . . . .	58
<i>Jan Beutel, Matthias Dyer, Kevin Martin</i>	

BASUMA - A Body Sensor System for Telemedicine.....	60
<i>J.-P. Ebert, D. Dietterle, M. Lang, T. Falck, J. Espina, Frieder Scheller, Günther Uhrich</i>	
Interactive In-Field Inspection of WSNs .....	62
<i>Matthias Ringwald, Mustafa Yücel, Kay Römer</i>	
<b>Sentient Future Competition: Winners</b>	
Introduction.....	66
<i>George Coulouris, Marcelo Pias, Irina Pien</i>	
Large Scale Body Sensing for Infectious Disease Control .....	68
<i>Markus Endler</i>	
BIN IT! - The Intelligent Waste Management System.....	71
<i>David Schoch, Matthias Sala</i>	
Vision of Congestion-Free Road Traffic and Cooperating Objects.....	74
<i>Ricardo Morla</i>	
<b>Sentient Future Competition: Highly Commended Entries</b>	
Ambient Intelligence by Collaborative Eye Tracking .....	80
<i>Eiko Yoneki</i>	
A day in the life of a not too distant future .....	84
<i>Phillip R. De Caux</i>	
Embedded WiSeNts & Agnostic Algorithms of Creation .....	86
<i>Panagiotis Bairaktaris</i>	
Father in Womb .....	90
<i>T. Camilo, A. Rodrigues, J. Sá Silva, F. Boavida, E. Sá</i>	
LocuSent - large scale locust control system .....	92
<i>Milo Lavén</i>	
PerSens: Personality Sensors .....	96
<i>Zinaida Benenson, Mesut Güneş, Marin Wenig</i>	
Sentient Guardian Angel.....	98
<i>Marcus Christ, Gerald Eichler, Klaus Mieth, Stefanie Richter, Jens Schmidt, Jens Wukasch</i>	
<b>Author Index .....</b>	<b>101</b>