

# Lecture Notes of the Institute for Computer Sciences, Social Informatics and Telecommunications Engineering

102

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# Sensor Systems and Software

Third International ICST Conference,  
S-Cube 2012  
Lisbon, Portugal, June 4-5, 2012  
Revised Selected Papers

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# Preface

The Third International ICST Conference on Sensor Systems and Software (S-cube 2012) was held during June 4–5, in Lisbon, Portugal. The conference focuses on the research challenges arising from the development of software systems for wireless sensor networks (WSNs). WSNs introduce innovative and interesting application scenarios that may support a large amount of different applications including environmental monitoring, disaster prevention, building automation, object tracking, nuclear reactor control, fire detection, agriculture, healthcare, and traffic monitoring. The widespread acceptance of these new services can be improved by the development of novel programming paradigms, middleware, and technologies that have the potential to radically simplify the development and deployment of WSN applications. Such improvements require contributions from many fields of expertise such as embedded systems, distributed systems, data management, system security, and machine learning. The emphasis is, thus, on layers well above the traditional MAC, routing, and transport layer protocols.

This year's technical program included four invited talks/papers, seven regular papers, and three demos. Overall we received 18 submissions corresponding to an acceptance rate of 38%. The papers make quite diverse contributions with an emphasis on: middleware, frameworks, learning from sensor data streams, stock management, e-health, and Web of Things.

There were around 25 registrants for the conference. The social program included a dinner at “A Severa,” a picturesque restaurant in downtown Lisbon, where the attendees had the opportunity to listen to “fado,” a music style that is characteristic of Portugal and that has recently been classified as part of the World Cultural Heritage.

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# Table of Contents

## Day One

|                                                                                                                                                                |    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| Vehicular Sensing: Emergence of a Massive Urban Scanner .....                                                                                                  | 1  |
| <i>Michel Ferreira, Ricardo Fernandes, Hugo Conceição,<br/>Pedro Gomes, Pedro M. d'Orey, Luís Moreira-Matias, João Gama,<br/>Fernanda Lima, and Luís Damas</i> |    |
| Framework for a Self-managed Wireless Sensor Cloud for Critical Event<br>Management .....                                                                      | 15 |
| <i>Nithya G. Nair, Philip J. Morrow, and Gerard P. Parr</i>                                                                                                    |    |
| Middleware Mechanisms for Agent Mobility in Wireless Sensor and<br>Actuator Networks .....                                                                     | 30 |
| <i>Nikos Tziritas, Giorgis Georgakoudis, Spyros Lalis,<br/>Tomasz Paczesny, Jarosław Domaszewicz, Petros Lampsas, and<br/>Thanasis Loukopoulos</i>             |    |
| Vital Responder – Wearable Sensing Challenges in Uncontrolled<br>Critical Environments .....                                                                   | 45 |
| <i>Miguel Coimbra and João Paulo Silva Cunha</i>                                                                                                               |    |
| Time Series Prediction for Energy-Efficient Wireless Sensors:<br>Applications to Environmental Monitoring and Video Games .....                                | 63 |
| <i>Yann-Aël Le Borgne and Gianluca Bontempi</i>                                                                                                                |    |

## Day Two

|                                                                                                                     |     |
|---------------------------------------------------------------------------------------------------------------------|-----|
| Connected Cars: How Distributed Data Mining Is Changing the Next<br>Generation of Vehicle Telematics Products ..... | 73  |
| <i>Hillol Kargupta</i>                                                                                              |     |
| Modelling and Simulation of Underwater Low-Power Wake-Up<br>Systems .....                                           | 75  |
| <i>Salvador Climent, Antonio Sanchez, Juan Vicente Capella,<br/>Sara Blanc, and Juan José Serrano</i>               |     |
| Collaborative Sensing Platform for Eco Routing and Environmental<br>Monitoring .....                                | 89  |
| <i>Markus Duchon, Kevin Wiesner, Alexander Müller, and<br/>Claudia Linnhoff-Popien</i>                              |     |
| Integrate WSN to the Web of Things by Using XMPP .....                                                              | 105 |
| <i>Pin Nie and Jukka K. Nurminen</i>                                                                                |     |

|                                                                                                                    |     |
|--------------------------------------------------------------------------------------------------------------------|-----|
| Challenges and Opportunities for Embedded Computing in Retail<br>Environments .....                                | 121 |
| <i>Kunal Mankodiya, Rajeev Gandhi, and Priya Narasimhan</i>                                                        |     |
| The Need for Standardized Tests to Evaluate the Reliability of Data<br>Transport in Wireless Medical Systems ..... | 137 |
| <i>Helena Fernandez-Lopez, José A. Afonso, J.H. Correia, and<br/>Ricardo Simoes</i>                                |     |
| Link Stability in a Wireless Sensor Network – An Experimental<br>Study .....                                       | 146 |
| <i>Stefan Lohs, Reinhardt Karnapke, and Jörg Nolte</i>                                                             |     |
| <b>Author Index</b> .....                                                                                          | 163 |