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

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The original version of the book was revised: The copyright line was incorrect. The Erratum to the book is available at
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Preface

The advances in wireless communication technologies and the proliferation of mobile devices have enabled the realization of intelligent environments for people to communicate with each other, interact with information-processing devices, and receive a wide range of mobile wireless services through various types of networks and systems everywhere, anytime. This «Internet of Things» will dramatically modify our lives allowing progress in various domains such as health, security, and ITS (intelligent transportation systems).

A key enabler of this pervasive and ubiquitous connectivity environment is the advancement of software technology in various communication sectors, ranging from communication middleware and operating systems to networking protocols and applications. The international conference series on Mobile Wireless Middleware, Operating Systems, and Applications (MOBILWARE) is dedicated to addressing emerging topics and challenges in various mobile wireless software-related areas. The scope of the conference includes the design, implementation, deployment, and evaluation of middleware, operating systems, and applications for computing and communications in mobile wireless systems.

MOBILWARE 2009 was the second edition of this conference, which was made possible thanks to the sponsorship of ICST and Create-Net and most importantly the hard work of the TPC and reviewers.

Similar to the first successful edition we had 63 submissions from 20 different countries this year, reflecting the international interest in the conference topics. After a thorough review process, we finalized an excellent technical program including 29 papers. These papers were grouped into eight technical sessions on:

- Location and tracking supports and services
- Location-aware and context-aware mobile support and services I
- Location-aware and context-aware mobile support and services II
- Middleware for QoS awareness, adaptation, and fault-tolerance of mobile services
- Mobility-aware wireless service discovery, management, and delivery
- Middleware for mobile computing and intelligent and mobile agent technologies for mobile systems and services
- OS/middleware for embedded systems, wearable networks, and personal area networks
- Mobility management and handoff management in heterogeneous networks

We want to express our sincere gratitude to all the authors who submitted their papers to this conference and to all the reviewers whose accurate work was crucial for the finalization of this high-quality final technical program.
The MOBILWARE 2009 technical program also included two excellent keynote speeches, namely, “The Footprint of European R&D Programmes on Future Internet Developments” given by Franco Accordin o, Scientific Officer, European Commission's Information Society and Media Directorate-General, and “Application Development Platforms for Emerging Smart Environments” presented by Petri Liuha, Director, Embedded Systems Technology Initiatives at Nokia Research Center, Finland. We thank the keynote speakers for contributing to the quality and the success of this event.

In addition, MOBILWARE 2009 featured two pre-conference tutorials, one on standards for delivering IPTV services in managed environments and one on the theory and practice of porting mobile applications.

Furthermore, we enhanced the overall program by four pre-conference workshops, namely:

- Workshop on User-Centric Pervasive Adaptation (UCPA 2009)
- Workshop on Interconnecting Ubiquitous Islands using Mobile and Next-Generation Networks (Ubi-Islands 2009)
- Workshop on Business Models for New Mobile Platforms (BMMP 2009)
- Workshop on Wireless Sensor Networks Architectures, Simulation and Programming (WASP 2009)

We express our deepest thanks to the tutorial speakers and all the workshop organizers and most importantly Cristian Hesselman, the MOBILWARE 2009 Tutorial and Workshop Chair.

Finally, we would like to thank Paolo Bellavista and Linda Xie, the General Co-chairs, for their constant motivation and support, as well as Gergely Nagy, the Conference Organization Chair, and Carlo Giannelli, the Publication and Web Chair, for helping in all the organizational matters. In addition, we like to thank the whole ICST team for their constant support in making this event happen.

We hope you enjoy the proceedings, which provide a snapshot of the state of the art in mobile wireless middleware, operating systems, and applications.

March 2009

Jean-Marie Bonnin

Thomas Magedanz

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