Preface

This volume contains papers presented at the 5th International Conference on Mobile Wireless Middleware, Operating Systems, and Applications (MOBILWARE), held during November 13–14, 2012, in Berlin, Germany. The advances in wireless communication technologies and the proliferation of mobile devices have enabled the realization of intelligent environments for people and machines 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. A key enabler of these pervasive and ubiquitous connectivity environments is the advancement of software technology in various communication sectors, ranging from communication middleware and operating systems to networking protocols 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 2012 was the fifth edition of this conference, and it was made possible thanks to the organization/endorsement of the European Alliance of Innovation (EAI), the sponsorship of Create-Net, and most importantly the hard work of the TPC members. The theme of this year’s Mobilware conference was: “Mobile Middleware for M2M Interaction and Smart City Applications.”

Similar to the last successful editions, we received high-quality submissions (32 this year), reflecting the international interest for the conference topics. After a thorough review process, we finalized an excellent technical program including 18 regular papers from 11 countries and four continents. These papers have been grouped into five technical sessions on:

- Internet of Things and Mobile Sensing
- Mobile Middleware Platforms
- Mobile Networks
- System Support for Mobile Applications
- Context Awareness

We want to express our sincere gratitude to all the authors who submitted their papers to this conference and to all the TPC members whose diligent work was crucial for the finalization of this high-quality final technical program.

Additionally, the technical program had two excellent keynote speeches: “Experimentation for the Internet of Things,” and “Universities for Future Internet (UNIFI).” The first was given by Mesut Günes, Freie Universität Berlin. The second, covering insights into academic mobile/NGN testbed deployments in Chile, Thailand, and Vietnam, was given by three speakers: Alfonso Ehijo, Universidad de Chile; Nguyen Huu Thanh, Hanoi University of Science and Technology;
and Prasit Prapinmongkolkarn, Department of Electrical Engineering, Chulalongkorn University.

The technical program also includes a “Panel on Mobile Apps and IT for Energy Efficiency,” organized by Klaus David, University of Kassel, Germany.

We thank the keynote speakers and the panelists for contributing to the quality and the success of this event.

Finally, we would like to thank Paolo Bellavista and Thomas Magedanz, the General Co-chairs, for their constant motivation and support, as well as Carlo Giannelli, the Publication and Web Chair, for helping in all the organizational matters. In addition, we would like to thank the whole EAI team for their constant support this event happen.

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

November 2012

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