

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

104

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# Mobile and Ubiquitous Systems: Computing, Networking, and Services

8th International ICST Conference, MobiQuitous 2011  
Copenhagen, Denmark, December 6–9, 2011  
Revised Selected Papers

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# Preface

This volume is the result of the 8th Annual International Conference on Mobile and Ubiquitous Systems: Computing, Networking and Services (MobiQuitous 2011), which was held in Copenhagen during December 6–9, 2011.

Copenhagen is the capital and largest city of Denmark, and one of the most beautiful cities of northern Europe. It is a major regional center of culture, business, media, and science, as indicated by several international surveys and rankings. Life science, information technology and shipping are important sectors, and research & development plays a major role in the city's economy. Its strategic location and excellent infrastructure, with the largest airport in Scandinavia located 14 minutes by train from the city center, have made it a regional hub and a popular location for regional headquarters and conventions.

MobiQuitous has a well-established reputation as a friendly and interactive forum for practitioners and researchers from diverse backgrounds, where they can interact and exchange experiences about the design and implementation of mobile and ubiquitous systems.

This year the main conference was complemented by an industry track, including contributions from industry researchers and from professionals in the field, and a poster and demo session. The program also featured two keynote speeches delivered by distinguished experts in the field. Sajal K. Das (Director of the Center of Research in Wireless Mobility and Networking, at the University of Texas at Arlington, USA), opened the first conference day with a speech on collaborative, distributed, and multi-modal sensing applications entitled “Collaborative Multi-modal Sensing: Challenges and Opportunities.” The second day was opened by Andrew T. Campbell (Director of the Smartphone Sensing Group at the Dartmouth College, USA), who presented the potentialities and the challenges of the smartphone as a sensing device in the speech entitled “Smartphone Sensing for the Masses.” At the end of the conference two workshops covered emerging research areas in the field of wireless sensors networks, [The Second International Workshop on Advanced Applications in Sensor Networks (WAASN)], and in design, evaluation, optimization and testing of systems for context computing [Third Workshop on Context-Systems Design, Evaluation and Optimization (CoSDEO)].

This volume includes the revised versions of all papers, posters and demos presented at MobiQuitous 2011 in a single-track format, organized thematically in nine parts as indicated in the Table of Contents. We also had a dedicated session for papers that were competing for the “Best Paper Award,” which was assigned to the paper entitled “What’s Around Me? Spatialized Audio Augmented Reality for Blind Users with a Smartphone” (Jeffrey Blum, Mathieu Bouchard and Jeremy Cooperstock). We also assigned a “Best Paper Run-Up Award” to the second best paper: “Real-Time Detection of Anomalous Taxi

Trajectories from GPS Traces” (Chao Chen, Daqing Zhang, Pablo Samuel Castro, Nan Li, Lin Sun and Shijian Li).

Attendance increased this year considerably, laying the foundation for establishing MobiQuitous as a key annual conference in the calendar of researchers in this area. We are happy to announce that the ninth edition of MobiQuitous will be held in Beijing in December 2012.

We close this preface by acknowledging the vital role that the Technical Program Committee members and additional referees played during the review process. Their efforts ensured that all submitted papers received a proper evaluation. We thank EAI, and ICST for assisting with organization matters, and CREATE-NET, Nokia, and Technocell AG for technically co-sponsoring the event, and the University of Applied Sciences and Arts of Southern Switzerland (SUPSI), for supporting the organization of the event. We also thank the rest of the team that put together this year’s event, in particular the Publicity Co-chairs Mikkel Baun Kjærgaard, Yunhuai Liu, and Qi Han, and the Web Chair Alan Ferrari. We particularly thank Elena J. Fezzardi who managed the financial issues, the publication process and the local organization in a very prompt and professional manner on behalf of EAI, and Imrich Chlamtac of CREATE-NET for his continuous support of the conference. Finally, we thank all participants for attending MobiQuitous 2011 and making it such a successful conference!

December 2011

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