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# Mobile Web Information Systems

11th International Conference, MobiWIS 2014  
Barcelona, Spain, August 27-29, 2014  
Proceedings



Springer

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# Preface

This volume includes a collection of research articles presented at the 11th International Conference on Mobile Web Information Systems (MobiWis 2014), held in Barcelona, Spain, during August 27–29, 2014. The area of mobile web and information systems is growing at a rapid pace given the ubiquity of mobile devices and the advances in web technologies, network communication, and software systems. The number of mobile web users has been increasing in recent years both in the developed as well as the developing countries across the globe. According to mobiThinking (<http://mobithinking.com/>) China has more mobile web/Internet users than any other country. Similarly, other developing countries such as Egypt, India, and South Africa, etc., have been following significant growth in the use of mobile web over the last few years. Similarly, the United Nations specialized agency for Information and Communication Technologies, the ITU (International Telecommunication Union)<sup>1</sup> estimates that there are 2.3 billion mobile broadband subscriptions in the world; out of which 55% are in developing countries.

The International Conference on Mobile Web Information Systems (MobiWis) aims to advance research on and practical applications of mobile web and information systems. It provides a forum for researchers, developers, and practitioners from academia and industry in order to share research ideas, knowledge, and experiences in the areas of mobile web and information systems. MobiWis 2014 comprised a set of tracks which included (emerging) areas such as: mobile software systems, middleware/SOA for mobile systems, context- and location-aware services, data management in the mobile web, mobile cloud services, mobile web of things, mobile web security, trust and privacy, mobile networks, protocols and applications, mobile commerce and business services, HCI in mobile applications, social media, and adaptive approaches for mobile computing.

MobiWis 2014 attracted 75 submissions from various countries across the world. All the papers were peer-reviewed by the members of Program Committee. Based on the reviews 24 papers were accepted for the conference. The acceptance rate was 32%. The accepted papers covered a range of topics related to the theme of the conference. In addition to the research articles, MobiWis 2014 featured the following four invited talks:

- CLOUDs: A Large Virtualization of Small Things  
Prof. Keith Jeffery, Independent Consultant, Ex-Director IT at STFC Rutherford Appleton Laboratory, United Kingdom
- Internet of Things, People, and Processes  
Prof. Schahram Dustdar, Vienna University of Technology, Austria

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<sup>1</sup> ITU: <http://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx>

- Cognitive Cars and Smart Roads - Applications, Challenges, and Solutions  
Prof. Azzedine Boukerche, University of Ottawa, Canada
- Mobile Cloud  
Prof. Fun Hu, University of Bradford, United Kingdom

These talks were delivered in conjunction with the co-located conference of the 2nd International Conference on Future Internet of Things and Cloud (Fi-Cloud 2014).

We would like to thank the invited speakers, Prof. Keith Jeffery, Prof. Schahram Dustdar, Prof. Azzedine Boukerche, and Prof. Fun Hu for delivering very interesting and visionary talks. We would also like to thank all authors for submitting their work to MobiWIS 2014 and for contributing to this volume and for presenting and discussing their papers during the conference. We highly appreciate their contributions to the MobiWis.

We also thank all the Program Committee members who provided valuable and constructive feedback to the authors and to the program chairs. We would like to thank the conference general chair, Schahram Dustdar and members of the Organizing Committee for their help and support in the organization of the conference. Special thanks also to Joyce El Haddad (Publicity Chair), Samia Loucif (Workshop Chair), Farookh Hussain (Journal Special Issue Coordinator), Hatem Musbah Ibrahim (Website Administrator) and the track chairs: Georgia M. Kapitsaki, Sven Casteleyn, Sergio Ilarri, Alberto Sillitti, Beniamino Di Martino, George Ghinea, Azizah Abd Manaf, Lisandro Zambenedetti Granville, Rainer Unland, Carlos Duarte, Hend S. Al-Khalifa, Bernady O. Apduhan, Tor-Morten Gronli, and Vincenzo De Florio.

We would like to thank the local organizing team of the Universitat Politècnica de Catalunya (Spain) for their great help and support. Our sincere thanks also go to the Springer LNCS team, Alfred Hofmann, Anna Kramer and Christine Reiss, for their valuable support in the approval and production of the conference proceedings.

We wish the conference participants a fruitful and enjoyable time at the conference and in Barcelona.

August 2014

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