Proceedings of the
2nd International Workshop on Information Management for Mobile Applications

Message from the Workshop Chairs

Mobile devices pose tremendous challenges to the design and implementation of information systems suited for mobile environments. While users expect similar functionality on their smart-phone as provided on their laptop or desktop computer, the hardware and communication platforms are still limited. Especially, data-intensive mobile applications require new ways of data management, processing, and analysis. Crucial issues include energy-efficiency, limited CPU power and storage, real-time processing, small displays, and communication costs.

The International Workshop on Information Management for Mobile Applications (IMMoA'12) targets to provide a forum for researchers and practitioners to present, share, and discuss insights, advancements, and challenges in technologies and mechanisms which support the management of mobile, complex, integrated, distributed, and heterogeneous data-focused applications.

The workshop aims in particular at the challenges of managing complex data and data models in a mobile context. Mobile data management has become an important research area in the field of data management. Therefore, the 38th International Conference on Very Large Databases provides an interesting forum to discuss recent advancements in mobile data management research. The limitations but also new opportunities of mobile devices initiated new research topics which are addressed in this workshop.

We received more than ten high quality submissions of which we could accept five as full papers and and one as short paper. The papers have been peer-reviewed by three to four reviewers each. The accepted papers discuss data management techniques for distributed mobile applications and peer-to-peer systems, integration of distributed mobile data sources, mechanisms for privacy preservation, and context-based systems. The workshop program is completed by an invited talk entitled "Dynamic Context Management for Mobile Applications" given by Prof. Dr. Daniela Nicklas from Oldenburg University.

We hope that the workshop initiates inspiring and fruitful discussions and that the second edition will be as successful as the first workshop held in 2011. We would like to thank the DFG Research Cluster Ultra High-Speed Mobile Information and Communication (UMIC, `http://www.umic.rwth-aachen.de`) at RWTH Aachen University, Germany, for their support in organizing this event. Furthermore, we would like to thank the reviewers for their good work.

Thierry Delot
University of Valenciennes & Inria Lille

Sandra Geisler
RWTH Aachen University

Christoph Quix
RWTH Aachen University

Bo Xu
University of Illinois at Chicago

Workshop Chairs and Program Committee

Workshop Chairs

- Thierry Delot, Dept. of Computer Science, University of Valenciennes & Inria Lille, France

- Sandra Geisler, Information Systems, RWTH Aachen University, Germany

- Christoph Quix, Information Systems, RWTH Aachen University, Germany

- Bo Xu, Department of Computer Science, University of Illinois at Chicago

Program Committee

Yuan An, Drexel University, USA	Jochen Meyer, OFFIS, Germany
Ying Cai, Iowa State University, USA	Nathalie Mitton, INRIA Lille, France
Xin Chen, NavTeq, USA	Xinzheng Niu, University of Electronic Science and Technology of China, China
Hyung-Ju Cho, Ajou University, Korea	Aris Ouksel, University of Illinois at Chicago, USA
Christine Collet, Grenoble INP, France	Claudia Plant, Florida State University, USA
Bruno Defude, Télécom & Management Sud-Paris, France	Florence Sèdes, University Paul Sabatier Toulouse, France
Marwan Hassani, RWTH Aachen University, Germany	David Taniar, Monash University, Australia
Hideki Hayashi, Hitachi Central Research Laboratory, Japan	Masaaki Tanizaki, Hitachi Central Research Laboratory, Japan
Sergio Ilarri, University of Zaragoza, Spain	Goce Trajcevski, Northwestern University, USA
David Kensche, Thinking Networks AG, Germany	Upkar Varshney, Georgia State University, USA
Xiangyang Li, Illinois Institute of Technology, USA	Jari Veijalainen, University of Jyväskylä, Finland
Andreas Lorenz, Deutsche Telekom AG, Germany	Ouri Wolfson, University of Illinois at Chicago, USA
Doug Lundquist, University of Illinois at Chicago, USA	José-Luis Zechinelli-Martini, Universidad de Las Americas Puebla, Mexico
Sanjay Madria, Missouri University of Science and Technology, USA	Xianggang Zhang, University of Electronic Science and Technology of China, China

Table of Contents