



Mobilware 2010 Technical Program



IWMMN and MAPPS Workshops (June 30, 2010)

First International Workshop on Mobile Multimedia Networking (IWMMN 2010)

9:00 Session Opening

Welcome from the IWMMN Chairs

9:00-10:30 Morning Session: Wireless Multimedia Networking Practices, Applications and Experiments

Chair: Honggang Wang

Bootstrapped Low Complexity Iterative Decoding Algorithm for Low-Density Parity-Check (LDPC) Codes

Albashir Mohamed, Maha Elsabrouty, Salwa El-Ramly

Quick Prototyping of Multifacete Interface for Healthcare Wireless Sensor Network

Rahul Dubey, Hong Liu

10:30-11:00 Coffee Break

11:00-12:30 Morning Session: Wireless Multimedia Networking Practices, Applications and Experiments

Chair: Wei Wang

An Evaluation of Mobile End Devices in Multimedia Streaming Scenarios

Michael Ransburg, Mario Jonke, Hermann Hellwagner

An Extended IGMP Protocol for Mobile IPTV Services in Mobile WiMAX

Eunjo Lee, Sungkwon Park, Joochan Lee, Phooi Yee Lau

12:30-14:00 Lunch Break

14:00-15:30 Afternoon Session: Wireless Multimedia Networking Theories, Current Benchmark, and Strategy Optimization

Chair: Wei Wang

Optimal Expected Discounted Reward of a Wireless Network with Award and Cost

Wenlong Ni, Wei Li, Demetrios Kazakos

A Spectrum Sharing Scheme in Two Cellular Wireless Networks

Yuhong Zhang, Wei Li

A Perspective on Estimation of Available Capacity in Wireless Networks

Ramesh Babu

Mobile Healthcare Infrastructure with QoS and Security

Afsheen Mughal, Mohammed Raza Kanjee, Hong Liu

15:30-16:00 Coffee Break

16:00-17:30 Afternoon Session: Wireless Multimedia Networking Theories, Current Benchmark, and Strategy Optimization
Chair: Honggang Wang

A Survey on the Cross-layer Design for Wireless Multimedia Sensor Networks
Honggang Wang, Wei Wang, Shaoen Wu, Kun Hua

A Survey on Cognitive Radio Networks
Jingfang Huang, Honggang Wang, Hong Liu

A Comprehensive P-Persistent Algorithm in Multi-channel and Multi-interface Cognitive Network
Junwei Lv, Weili Lei, Tigang Jiang

International Workshop on Mobile and Location-based Business Applications (MAPPS 2010)

13:30-14:15 Invited talk

Title: Next Generation of ICT Business Applications
Speaker: Eduard Babulak (University of the South Pacific, Fiji)

14:15-15:45 Session 1

The Relationship Between User Location History and Interests in Products and Services
Joshua Hurwitz, David Wheatley, Young Lee

Predicted and Corrected Location Estimation of Mobile Nodes Based on the Combination of Kalman Filter and the Bayesian Decision Theory
Muhammad Alam, Mazliham Muhammad Suud, Patrice Boursier, Shahrulniza Musa, Jawahir Che Mustapha Yusuf

Enhancing Customer Privacy for Commercial Continuous Location-based Services
David Zhang, Carsten Kleiner, Jens Bertram

15:45-16:15 Coffee Break

16:15-17:45 Session 2

SociCare: Towards a Ubiquitous Context Aware Mobile Community Emergency System
Mark Bilandzic, Christian Menkens, Julian Sussmann, Daniel Kleine-Albers, Eva Bittner, Armand Golpaygani, Bernhard Mehl, Jonas Huckestein, Othmane Khelil

A Workflow Definition Language for Business Integration of Mobile Devices
Martin Werner, Claudia Linnhoff-Popien, Stephan Verclas

Adaptivity Types in Mobile User Adaptive System Framework
Ondrej Krejcar

17:45-18:30 Invited talk & discussion

Title: Why Mobile Business Applications will be one key success factor for business in the near future
Speaker: Stephan Verclas (T-Systems, Germany)

Mobilware Day 1 (July 1, 2010)

9:00-9:30 Session Opening

Welcome from the General and TPC Chairs

9:30-10:30 Keynote 1

Title: Computing Challenges in Intelligent Transportation Systems

Speaker: Ouri Wolfson, Professor, Department of Computer Science, University of Illinois, Chicago

10:30-11:00 Coffee Break

11:00-12:30 Session 1: Novel applications and communication protocols for wireless networks (Chair: Paolo Bellavista)

A Secure Mobile OTP Token

Fred Cheng, International Technological University and FPC Consultancy, USA

ISI and ICI Suppression for Mobile OFDM System by Using a Hybrid Two Layer Diversity Receiver

Gao Jing, Wada Tomohisa, University of the Ryukyus, Japan

Using Smartphones and Wireless Mobile Sensor Networks to Detect Car Accidents and Provide Situational Awareness to Emergency Responders

Chris Thompson, Jules White, Brian Dougherty, Adam Albright, Douglas C. Schmidt, Vanderbilt University, USA

12:30-14:00 Lunch Break

14:00-15:30 Session 2: Mobility Management and Handoff Management (Chair: Thomas Magedanz)

XtreemOS-MD: Grid Computing from Mobile Devices

Alvaro Martínez, Santiago Prieto, Noé Gallego, Ramon Nou, Jacobo Giralt, Toni Cortes, Barcelona Supercomputing Center, Spain

The Proxy-based Mobile Grid

Azade Khalaj, Hanan Lutfiyya, Mark Perry, University of Western Ontario, Canada

Access Network Discovery and Selection in the Future Broadband Wireless Environment

Marius Corici, Jens Fiedler, Thomas Magedanz, Dragos Vingarzan, Fraunhofer Institute for Open Communication Systems (FOKUS), Germany

Internet Connectivity Sharing in Multi-path Spontaneous Networks: Comparing and Integrating Network- and Application-Layer Approaches

Paolo Bellavista, Carlo Giannelli, University of Bologna, Italy

15:30-16:00 Coffee Break

16:00-17:30 Session 3: Human-computer interface for mobile devices (Chair: Honggang Wang)

Prototyping Convergence Services on Broadband Networks

Alice Motanga, Andreas Bachmann, Thomas Magedanz, Fraunhofer Institute for Open Communication Systems (FOKUS), Germany

Adaptive Online Deployment for Resource Constrained Mobile Smart Clients

Tim Verbelen, Raf Hens, Tim Stevens, Filip De Turck, Bart Dhoedt, Ghent University – IBBT, Belgium

Addressing Challenges with Augmented Reality Applications on Smartphones

J. Benjamin Gotow, Krzysztof Zienkiewicz, Jules White, Douglas C. Schmidt, Vanderbilt University, USA

Location Cognition for Wireless Systems: Classification with Confidence

Stefan Aust, Tetsuya Ito, NEC Communication Systems, Japan; Peter Davis, Telecognix Corporation, Japan

Mobilware Day 2 (July 2, 2010)

9:00-9:30 (optional) Internal/public meeting of the Mobilware+Workshops Organizing Committees

9:30-10:30 Keynote 2

Title: Event Processing on Mobile Phones: Mobile 3.0?

Speaker: Archan Misra, Senior Scientist, Telcordia Technologies

10:30-11:00 Coffee Break

11:00-12:30 Session 4: Mobile intelligent Middleware (Chair: Ying Cai)

Towards an Elastic Application Model for Augmenting Computing Capabilities of Mobile Platforms

Xinwen Zhang, Sangoh Jeong, Anugeetha Kunjithapatham, Simon Gibbs, Samsung Information Systems America, USA

A Self-Organizing Approach for Building and Maintaining Knowledge Networks

Gabriella Castelli, Marco Mamei, Franco Zambonelli, University of Modena and Reggio Emilia, Italy

Dynamic Adaptive Middleware Services for Service Selection in Mobile Ad-hoc Networks

Rogério Garcia Dutra, Moacyr Martucci Jr., University of Sao Paulo, Brazil

12:30-14:00 Lunch Break

14:00-15:30 Session 5: Location-aware and context-aware networking and computing (Chair: Chris Thompson)

An Object-Oriented Model in Support of Context-Aware Mobile Applications

Felix Dobsław, Aron Larsson, Theo Kanter, Jamie Walters, Mid Sweden University, Sweden

A Context Aware Interruption Management System for Mobile Devices

Sina Zulkernain, Praveen Madiraju, Sheikh Iqbal Ahamed, Marquette University, USA

Applying Behavioral Detection on Android-based Devices

Asaf Shabtai, Yuval Elovici, Ben-Gurion University, Israel

Context-enhanced Web Service Invocations in Mobile Business Processes

Heinz-Josef Eikerling, University of Applied Sciences Osnabrueck, Germany

15:30-16:00 Coffee Break

16:00-17:00 Session 6: Short Papers (Chair: Paolo Bellavista)

Power Aware with the Survivable Routing Algorithm for Mobile Ad hoc Networks

Golla Varaprasad, B.M.S. College of Engineering, India

Testing and Evaluating of Predictive Data Push Technology Framework for Mobile Devices

Ondrej Krejcar, VSB Technical University of Ostrava, Czech Republic

Service Space Portability Validation Modeling the Vehicular Context

Mihaly Borzsei, Nokia Research Center, Finland

Experiences from Developing a Context Management System Applied to Mobility

Baptiste Gaultier, Jean-Marie Bonnin, TELECOM Bretagne, France

17:00-17:30 Closing Remarks, Announcement of Best Papers invited to Associated Journals, and Open Discussion about Mobilware'11