



Mobilware 2009

Technical Program



Day 1, April 28, 2009

9h: Session Opening

Welcome from the TPC Chairs

9h30: Session 1 (90 mn)

Location and Tracking Supports and Services

An Analysis of Navigation Algorithms for Smartphones using J2ME

André C. Santos, Luis Tarrataca, Joao M. P. Cardoso, Portugal

FINDR: Low-Cost Indoor Positioning Using FM Radio

Andrei Papiatseyeu, Niko Kotilainen, Oscar Mayora, Venet Osmani

Digital Terrain Model Interpolation for Mobile Devices Using DTED Level 0 Elevation Data

Murat Ozyurt, Tuna Tugcu, Fatih Alagoz, Bogazici University, Turkey

Building a Personal Symbolic Space Model from GSM CellID Positioning Data

Filipe Meneses, Adriano Moreira, University of Minho, Portugal

11h: **Coffee Break** (30 mn)

11h30: Session 2 (90 mn)

Context-aware Mobile Supports and Services I

Context Aware Multiparty Session Support for Adaptive Multicasting in Heterogeneous Mobile Networks

Josephine Antoniou, Christian Riede, Filipe Cabral Pinto, Andreas Pitsillides, University of Cyprus, Cyprus

The Contextual Map - a Context Model for detecting Affinity between Contexts

Robert Schmohl, Uwe Baumgarten, Technische Universität München, Germany

Towards an Opportunistic and Location-Aware Service Provision in Disconnected Mobile Ad Hoc Networks

Salma Ben Sassi, Nicolas Le Sommer, Université Européenne de Bretagne, France

A Quality of Context-Aware Approach to Access Control in Pervasive Environments

Alessandra Toninelli, Antonio Corradi, Rebecca Montanari, University of Bologna, Italy

13h: **Lunch Break** (60 mn)

14h: **Keynote 1** (45 Minutes)

"The Footprint of European R&D Programmes on Future Internet Developments"

Franco Accordino, Scientific Officer, European Commission's Information Society and Media Directorate-General

14h45: Session 3 (75 mn)

Context-aware Mobile Supports and Services II

Context Inference for Mobile Applications in the UPCASE Project

André C. Santos, Luis Tarrataca, Joao M. P. Cardoso, Diogo R. Ferreira, Pedro C. Diniz, Paulo Chainho, Portugal

Location-Based Botany Guide: a Prototype of Web-Based Tracking and Guiding

Rui Zhou, Gerhard Schneider, University of Freiburg, Germany

Scalable Interactive Middleware Components for Ubiquitous Fashionable Computers

Gyudong Shim, Kyu Ho Park, KAIST, Rep. of South Korea

16h: **Coffee Break** (30 mn)

16h30: Session 4 (90 mn)

Middleware for QoS Awareness, Adaptation, and Fault-tolerance of Mobile Services

Extending UPnP QoS Standard for Reducing Response Delay in Multimedia Home Networks

Jesús Sáez, Alvaro Reina, Ralf Seepold, Natividad Martínez Madrid, University Carlos III of Madrid, Spain

A Mission Management Framework for Unmanned Autonomous Vehicles

Eskindir Asmare, Anandha Gopalan, Morris Sloman, Naranker Dulay, Emil Lupu, Imperial College London, United Kingdom

Proactive Data Replication Using Semantic Information within Mobility Groups in MANET

Hoa Ha Duong, Isabelle Demeure, TELECOM ParisTech, France

Policy-based Middleware for QoS Management and Signaling in the Evolved Packet System

Richard Good, Fabricio Gouveia, Thomas Magedanz, Neco Ventura

Day 2 April 29, 2009

9h: **Keynote 2** (45 mn)

“Application development platforms for emerging smart environments”,

Petri Liuha, Director, Embedded Systems Technology Initiatives at Nokia Research Center, Finland

9h45: Session 5 (75 mn)

Mobility-aware Service Discovery, Management, and Delivery

Parallel Data Transfer with Voice Calls for Energy-Efficient Mobile Services

Jukka K. Nurminen, Janne Nöyränen, Nokia Research Center, Finland

Extending an IMS Client with Peer-to-peer Content Delivery

Jens Fiedler, Thomas Magedanz, Julius Müller, Fraunhofer FOKUS, Germany

A Service-oriented Framework Supporting Ubiquitous Disaster Response

Michele Amoretti, Maria Chiara Laghi, Gianni Conte, University of Parma, Italy

11h: **Coffee Break**

11h30: Session 6 (90 mn)

Middleware for Mobile Computing & Agent Technologies for Mobile Services

SeDeUse: A Model for Service-oriented Computing in Dynamic Environments

Hervé Paulino, Carlos Tavares, Universidade de Nova de Lisboa, Portugal

Chapar: A Cross-Layer Overlay Event System for MANETs

Amir R. Khakpour, Isabelle Demeure, TELECOM ParisTech

Intelligent Middle-Ware Architecture for Mobile Networks

Rayene Ben Rayana, Jean-Marie Bonnin, Telecom Bretagne, France

Design, Implementation and Case Study of WISEMAN: Wireless Sensors Employing Mobile Agents

Sergio González-Valenzuela, Min Chen, Victor C.M. Leung, University of British Columbia, Canada

13h: **Lunch Break**

14h15: Session 7 (75 mn)

OS/Middleware for Embedded Systems, Wearable and Personal Area Networks

A Base Solution for Exposing IMS Telecommunication Services to Web 2.0 Enabled Applications

Florian Deinert, Alin Murarasu, Andreas Bachmann, Thomas Magedanz, Fraunhofer FOKUS, Germany

Developing and Benchmarking Native Linux Applications on Android

Leonid Batyuk, Aubrey-Derrick Schmidt, Hans-Gunther Schmidt, Ahmet Camtepe, Sahin Albayrak, Technische Universität Berlin, Germany

Middleware Solutions for Self-Organizing Multi-hop Multi-path Internet Connectivity based on Bluetooth

Paolo Bellavista, Carlo Giannelli, University of Bologna, Italy

15h30: **Coffee Break**

16h: Session 8 (90 mn)

Mobility/Handoff Management in Heterogeneous Networks

Policy-based Device and Mobility Management

Pierre Imai, Bernd Lamparter, Marco Liebsch, NEC Europe Ltd.

An IMS-based Middleware Solution for Energy-Efficient and Cost-Effective Mobile Multimedia Services

Paolo Bellavista, Antonio Corradi, Luca Foschini, University of Bologna, Italy

IEEE 802.21 Assisted Seamless and Energy Efficient Handovers in Mixed Networks

Huaiyu Liu, Christian Maciocco, Vijay Kesavan, Andy L.Y. Low

Announcement/Subscription/Publication: Message Based Communication for Heterogeneous Mobile Environments

Henry Ristau, University of Rostock, Germany

17h30: **Closing session**