

**The 3rd Annual International Conference on Mobile and Ubiquitous Systems:
Networks and Services
(MOBIQUITOUS 2006)**

July 17-21, 2006 - San Jose, California

Technical Program

Monday, July 17 – Workshops

1. Advances in Sensor Networks
2. Ubiquitous Access Control

Tuesday, July 18

8:30 – 9:00 Welcome (General Chairs, TPC Chairs)

9:00 – 10:00 Keynote

Frederick L. Kitson, Vice President and Senior Director – Motorola Labs

10:00 – 10:30 Break

10:30 – 12:00 Paper Session 1: **Location management and LBS**

Identifying meaningful locations

Petteri Nurmi, HIIT, University of Helsinki

Johan Koolwaaij, Telematica Instituut, The Netherlands

Using Location Dependence to Manage Mobile Data

Daniel Crawl, Joseph Dunn, and John Bennett

Department of Computer Science

University of Colorado

Avneesh Bhatnagar, Verizon Data Services Inc.

Evan Speight, IBM Austin Research Laboratory

Information Flow Control for Location-based Services

Nishkam Ravi, Marco Gruteser* and Liviu Iftode

Department of Computer Science, Rutgers University

*WINLAB, ECE Department, Rutgers University

12:00 – 1:30 Lunch

1:30 – 3:30 Paper Session 2: **Mobile Ad Hoc Networks**

Interference based Call Admission Control for Wireless Ad Hoc Networks

Sridhar K N and Mun Choon Chan
Department of Computer Science, School of Computing,
National University of Singapore

Controlled Epidemic style Dissemination Middleware for Mobile Ad Hoc Networks

Mirco Musolesi, Cecilia Mascolo
Dept. of Computer Science
University College London

APHD: End-to-End Delay Assurance in 802.11e Based MANETs

Jian Li, Zhi Li, and Prasant Mohapatra
Department of Computer Science
University of California at Davis

A Cross-layer, Decentralized BitTorrent for Mobile Ad hoc Networks

Sundaram Rajagopalan, Chien-Chung Shen
Department of Computer and Information Sciences,
University of Delaware, Newark

3:30 – 4:00 Break

4:00 – 5:30 **Poster Session**

POISE: An Inexpensive, Low Power Location Sensor Based on Electrostatics

Mbou Eyole-Monono, Robert Harle, Andy Hopper
Computer Laboratory, Cambridge University, UK

A Generic Large Scale Simulator for Ubiquitous Computing

Miquel Martin, NEC Europe Ltd
Petteri Nurmi, HIIT, University of Helsinki,

Overload-Driven Mobility-Aware Cache Management in Wireless Environments

Humeyra Topcu-Altintas, Yun Huang and Nalini Venkatasubramanian
School of Information & Computer Sciences,
University of California, Irvine

Generalized “Yoking-Proofs” for a Group of RFID Tags

Leonid Bolotnyy and Gabriel Robins
Department of Computer Science,
University of Virginia

Wednesday, July 19

9:00 – 10:00 Keynote

Shannon Maher, UK Engineering Site Director - Google

10:00 – 10:30 Break

10:30 – 12:00 Challenges Session: **Challenges on Providing Services in a Ubiquitous, Mobile Environment**

12:00 – 1:30 Lunch

1:30 – 3:30 Paper Session 3: **Routing in ad-hoc and vehicular wireless networks**

TypeCast: Type-Based Routing in Wireless Ad-hoc Networks

Jinsong Lin and Rajive Bagrodia

Computer Science Department, University of California, Los Angeles

Randomized 3D Position-based Routing Algorithms for Ad-hoc Networks

A.E. Abdallah and T. Fevens and J. Opatrny

Department of Computer Science and Software Engineering

Concordia University, Montreal

MURU: A Multi-Hop Routing Protocol for Urban Vehicular Ad Hoc Networks

Zhaomin Mo, Hao Zhu, Kia Makki, Niki Pissinou

Telecommunications and Information Technology Institute

Florida International University, Miami,

A Comparative Study of Data Dissemination Models for VANETs

Tamer Nadeem, Siemens Corporate Research

Pravin Shankar, Liviu Iftode

Department of Computer Science

Rutgers University

3:30 – 4:00 Break

4:00 – 5:30 **Demos**

Thursday, July 20

8:30 – 10:00 Paper Session 4: **Wireless sensor networks**

Application-Centric Networking Framework for Wireless Sensor Nodes

Sukwon Choi, Hojung Cha

Dept. of Computer Science, Yonsei University, Seoul, Korea

Decomposing Data-Centric Storage Query Hot-Spots in Sensor Networks

Mohamed Aly, Panos K. Chrysanthis, Kirk Pruhs

Department of Computer Science

University of Pittsburgh

Adaptive Data Collection Scheme for Tracking Mobile Target in Wireless Sensor Networks

Ling Zhou and Arunabha Sen

CSE Dept. Arizona State University

10:00 – 10:30 Break

10:30 – 12:00 **Research in Progress Session**

Location Traceability of Users in Location-based Services

Yutaka Yanagisawa† Hidetoshi Kido†† Tetsuji Satoh†,††

†NTT Communication Science Laboratories, NTT Corporation

††Graduate School of Information Science and Technology, Osaka University

The Impact of the Context Interpretation Error on the Context

Prediction Accuracy

Stephan Sigg, Sandra Haseloff and Klaus David

University of Kassel

Pervaho: A Development & Test Platform for Mobile Ad hoc Applications

Patrick Eugster, Department of Computer Science, Purdue University

Benoît Garbinato and Adrian Holzer

University of Lausanne

A Framework to Provide Anonymity in Reputation Systems

Hugo Miranda Luís Rodrigues

Universidade de Lisboa

SIPCache: A Distributed SIP Location Service for Mobile Ad-Hoc Networks

Simone Leggio□ Hugo Miranday Kimmo Raatikainen□ Luis Rodriguesy

□ Department of Computer Science, University of Helsinki

yUniversidade de Lisboa, Departamento de Informática

12:00 – 1:30 Lunch

1:30 – 4:00 Paper Session 5: **Resource and service discovery mechanisms**

Sleeper: A Power-Conserving Service Discovery Protocol

J. Buford, *Panasonic Digital Networking Lab, Princeton*

B. Burg, *Panasonic Digital Networking Lab, San Jose, CA*

E. Celebi, P. Frankl, *Polytechnic University, NY*

A Multi-Protocol Approach to Service Discovery and Access in Pervasive Environments

Pierre-Guillaume Raverdy, Valérie Issarny, Rafik Chibout, Agnès de La Chapelle

INRIA-Rocquencourt

A Framework for Opportunistic Forwarding in Disconnected Networks

Iacopo Carreras, Daniele Miorandi and Imrich Chlamtac

CREATE.NET, Trento

An Empirical Evaluation of the Student-Net Delay Tolerant Network

Jing Su, Ashvin Goel†, Eyal de Lara

Department of Computer Science

†Department of Electrical and Computer Engineering

University of Toronto

Context-Based Adaptation of Mobile Phones Using Near-Field Communication

Dipanjan Chakraborty¹, Sandeep Jindal¹, Sudha Krishnamurthy², Sumit Mittal¹

¹*IBM India Research Lab, New Delhi, India*

²*Deutsche Telekom Laboratories, Berlin, Germany*

Friday, July 21 – Workshops

1. Personalized Networks

2. Vehicle-to-Vehicle Communications (V2VCOM)