

# Mobility Management in the Networks of the Future World (MobiWorld)

Monday, 11 April 2016 • 08:30 – 17:00 • Room: Bayview A

Mobility management has been identified as a key technology in the areas of heterogeneous networks, mobile networks, vehicular networks, multimedia computing, and autonomous computing, as well as in the Future Internet. The development of mobility management in the areas is expected to enable mobility services for users, vehicles, robots, etc. However, many issues in mobility management including location update, handover, identity split, security, and performance analysis have posed various challenges to the academic and industry. The purpose of MobiWorld 2016 is to bring together the academic and industry working on different aspects, exchange ideas, and explore new research directions for addressing the challenges in mobility management. MobiWorld 2016 also aims to publish high quality papers, which are closely related to various theories and practical applications in mobility management to highlight the state-of-art research.

## General Co-Chairs:

Ilun You (Soonchunhyang University, South Korea)

Pascal Thubert (Cisco Systems, France)

## Technical Program Co-Chairs:

Han-Chieh Chao (National Ilan University, Taiwan)

Karl Andersson (Lulea University of Technology, Sweden)

## Technical Program Committee:

Rui L. Aguiar (DETI - Universidade de Aveiro, Portugal)  
Joonsang Baek (Khalifa University, UAE)  
Aniello Castiglione (University of Salerno, Italy)  
Hsing-Chung Chen (Asia University, Taiwan)  
Yuh-Shyan Chen (National Taipei University, Taiwan)  
Der-Jiunn Deng (National Changhua University of Education, Taiwan)  
Christian Esposito (University of Naples, Italy)  
Muslim Elkotob (Vodafone, Germany)  
Ugo Fiore (University of Naples "Federico II", Italy)  
Jianfeng Guan (Beijing University of Posts and Communications, China)  
Antonio Jara (HES-SO, Switzerland)  
Ved Kafle (NICT, Japan)  
Jong-Hyouk Lee (Sangmyung University, Korea)

Phone Lin (National Taiwan University, Taiwan)  
José Santa Lozano (Univ. Centre of Defence at the Spanish Air Force Academy, Spain)  
Pietro Manzoni (Polytechnic University of Valencia, Spain)  
Mauro Migliardi (University of Padua, Italy)  
Karan Mitra (Luleå University of Technology, Sweden)  
Fei Song (Beijing Jiaotong University, China)  
Sangheon Park (Korea University, Korea)  
Francesco Palmieri (University of Salerno, Italy)  
Dhananjay Singh (Hankuk (Korea) University of Foreign Studies, Korea)  
Mika Ylianttila (University of Oulu, Finland)  
Jian Yuan (Tsinghua University, China)  
Baokang Zhao (National University of Defense Technology, China)  
Sherali Zeadally (University of Kentucky, USA)

08:30 – 10:00:

### Opening and Advances in Mobility Management 1

#### Simplified Wireless Connectivity for 5G Machine Type Communication

Peyman TalebiFard (The University of British Columbia, Canada); Stere Preda, Catherine Truchan, Suresh Krishnan and Denis Monette (Ericsson, Canada); Victor C.M. Leung (The University of British Columbia, Canada)

#### Mobility Management Scheme Based on Software Defined Controller for Content-Centric Networking

Fei Ren, Yajuan Qin, Huachun Zhou and Yakun Xu (Beijing Jiaotong University, P.R. China)

#### vBS on the Move: Migrating a Virtual Network for Nomadic Mobility in WiFi Networks

Kiyohide Nakachi and Yoza Shoji (National Institute of Information and Communications Technology, Japan)

#### Performance Analysis of an IP based Protocol Stack for WSNs

Sumeet Thombre, Raihan Ul Islam and Karl Andersson (Luleå University of Technology, Sweden); Mohammad Shahadat Hossain (University of Chittagong, Bangladesh)

10:30 – 11:00:

### Advances in Mobility Management 2

#### A Systematic Classification of Distributed IP Mobility

H. Anthony Chan (Huawei Technologies, USA); XinPeng Wei (Huawei Technologies, P.R. China); Jong-Hyouk Lee (Sangmyung

University, Korea); Seil Jeon (Instituto de Telecomunicacoes, Portugal); Fred Templin (Boeing Research and Technology, USA)

11:00 – 12:00:  
Invited Talk

#### Smart Identifier Network and Future Mobility Management Exploration

Hongke ZHANG (Beijing Jiaotong University, Beijing, China)

13:30 – 15:00:  
Advanced Network Technologies

#### Distributed Strategic Learning for Effective Gossiping in Wireless Networks

Christian Esposito, Aniello Castiglione and Francesco Palmieri, CG (Università di Salerno, Italy); Massimo Ficco (Second University of Naples, Italy)

#### Toward a Characterization of Human Activities using Smart Devices: A Micro/Macro Approach

Sébastien Faye and Nicolas Louveton (University of Luxembourg, SnT, Luxembourg); Gabriela Gheorghie and Thomas Engel (University of Luxembourg, Luxembourg)

#### Joint Data and Power Transfer Optimization for Energy Harvesting Wireless Networks

Bassem Khalif and Bechir Hamdaoui (Oregon State University, USA); Mahdi Ben Ghorbel (Qatar University, Qatar); Mohsen Guizani (QU, USA); Xi Zhang (Texas A&M University, ECE Department, USA)

#### Partially Overlapped Channel Interference Measurement Implementation and Analysis

Yonghui Su, Yue Wang, Yaodong Zhang, Yujie Liu and Jian Yuan (Tsinghua University,

P.R. China)

#### A Classification-Based Wisdom Caching Scheme for Content Centric Networking

Jianfeng Guan (Beijing University of Posts and Telecommunications, P.R. China); He Yunhang and Wei Quan (Beijing Jiaotong University, P.R. China); Neng Zhang (Beijing University of Posts & Telecommunications, P.R. China)

15:30 – 17:00:

### Security and Dependability

#### Subverting MAC: How authentication in mobile environment can be undermined

Fatema Al Mansoori, Joonsang Baek and Khaled Salah (Khalifa University of Science, Technology and Research, UAE)

#### A Smart Heuristic for Relieving RBB in Dependable Transmission Environment

Fei Song and Wei Quan (Beijing Jiaotong University, P.R. China); Hui Feng Yang and Wei Zhao (State Grid Hebei Electric Power Company, P.R. China); Hongke Zhang (Beijing Jiaotong University, P.R. China)

#### Random Cladding with Feedback Mechanism for Encrypting Mobile Messages

Yi-Li Huang and Fang-Yie Leu (Tunghai University, Taiwan); Ilun You (Soonchunhyang University, Korea); Hsing-Chung Chen (ASIA University, Taiwan); Chishyan Liaw and Jung-Chun Liu (Tunghai University, Taiwan)

#### Secure Mobile Instant Messaging Key Exchanging Protocol with One-Time-Pad Substitution Transposition Cryptosystem

Hsing-Chung Chen (Asia University, Taiwan); Heri Wijayanto (Mataram University, Indonesia); Chia-Hui Chang (Asia University, Taiwan); Fang-Yie Leu (Tunghai University, Taiwan); Kangbin Yim (Soonchunhyang University, Korea)