

## SERVICE AND APPLICATIONS

**Monday, March 14, 2005**

16:00 - 17:30 Room 206

### **SA01: Mobile Ad Hoc Networks**

**SA01-1: Fault and Intrusion Tolerance in Wireless Ad Hoc Networks (invited paper)**

N. A. Boudriga (University of 7th of November, Carthage, Tunisia), M. S. Obaidat (Monmouth University, USA)

**SA01-2: A Novel Signaling System for Multiparty Sessions in Peer-to-Peer Ad Hoc Networks**

Chunyan Fu (Concordia University, Canada), Roch H. Glitho (Ericsson, Canada, Concordia University, Canada), Rachida Dssouli (Concordia University, Canada)

**SA01-3: Distributed Multicast Grouping for Publish/Subscribe over Mobile Ad Hoc Networks**

Eiko Yoneki (University of Cambridge, UK), Jean Bacon (University of Cambridge, UK)

**SA01-4: A Service Continuity Layer for Mobile Services**

Ivar Jørstad (Norwegian University of Science and Technology, Norway), Do Van Thanh (Telenor R&D, Norway), Schahram Dustdar (Vienna University of Technology, Austria)

**Tuesday, March 15, 2005**

9:00 - 10:30 Room 206

### **SA02: Voice over IP**

**SA02-1: A Study on SIP Session Timer for Wireless VoIP**

Ai-Chun Pang (National Taiwan University, Republic of China), Chih-Hsiao Liu (National Taiwan University, Republic of China), Shu Ping Liu (National Taiwan University, Republic of China), Hui-Nien Hung (National Chiao Tung University, Republic of China)

**SA02-2: Performance Evaluation of VoIP over 3G-WLAN Interworking System**

R. Rajavelsamy (Samsung India Software Operations, India), Jeedigunta Venkateswar (Samsung India Software Operations, India), Balaji Holur (Samsung India Software Operations, India), Manoj Choudhary (Samsung India Software Operations, India), Osok Song (Samsung Electronics Co. Ltd., Korea)

**SA02-3: SIP-based Mobile VPN for Real-Time Applications**

Shun-Chao Huang (National Tsing Hua University, Taiwan), Zong-Hua Liu (National Tsing Hua University, Taiwan), Jyh-Cheng Chen (National Tsing Hua University, Taiwan)

**SA02-4: Toll-Free IP (TIP): Architecture and Implementation**

Tao Zhang (Telcordia Technologies, USA), Sunil Madhani (Telcordia Technologies, USA), Miriam Tauil (Telcordia Technologies, USA)

**Tuesday, March 15, 2005**

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### **SA03: Wireless LAN**

**SA03-1: A Comparative Performance Evaluation of RSS-based Positioning Algorithms Used in WLAN Networks (invited paper)**

Ahmad Hatami (Worcester Polytechnic Institute, USA), Kaveh Pahlavan (Worcester Polytechnic Institute, USA)

**SA03-2: TDOA Location System for IEEE 802.11b WLAN**

Ryota Yamasaki (Hitachi, Ltd., Japan), Atsushi Ogino (Hitachi, Ltd., Japan), Tsuyoshi Tamaki (Hitachi, Ltd., Japan), Takaki Uta (Hitachi, Ltd., Japan), Naoto Matsuzawa (Hitachi, Ltd., Japan), Takeshi Kato (Hitachi, Ltd., Japan)

**SA03-3: Minimizing Re-Authentication Overheads in Infrastructure IEEE 802.11 WLAN Networks**

Anindo Mukherjee (University of Cincinnati, USA), Tarun Joshi (University of Cincinnati, USA), Dharma P. Agrawal (University of Cincinnati, USA)

**SA03-4: Received Signal Strength based Location Estimation of a Wireless LAN Client**

Michael Robinson (McGill University, Canada), Ioannis Psaromiligkos (McGill University, Canada)

## Tuesday, March 15, 2005

16:00 - 17:30 Room 206

### SA04: Sensor Networks

#### SA04-1: Safety Warning Based on Roadway Sensor Networks

Kai Xing (The George Washington University, USA), Min Ding (The George Washington University, USA), Xiuzhen Cheng (The George Washington University, USA), Shmuel Rotenstreich (The George Washington University, USA)

#### SA04-2: Fault-Tolerant Target Detection in Sensor Networks

Min Ding (The George Washington University, USA), Dechang Chen (Uniformed Services University of the Health Sciences, USA), Andrew Thaeler (The George Washington University, USA), Xiuzhen Cheng (The George Washington University, USA)

#### SA04-3: Sensor Data Aggregation for Resource Inventory Applications

Tsung-Han Lin (National Taiwan University, Taiwan), Polly Huang (National Taiwan University, Taiwan)

#### SA04-4: Supporting Group Communication among Interacting Agents in Wireless Sensor Networks

Jaewon Shin (Stanford University, USA), Anthony Man-Cho So (Stanford University, USA), Leonidas Guibas (Stanford University, USA)

## Wednesday, March 16, 2005

9:00 - 10:30 Room 206

### SA05: Traffic Engineering

#### SA05-1: Simulation of Teletraffic Variables in UMTS Networks: Impact of Lognormal Distributed Call Duration

Antonietta Spedalieri (Technical University of Catalonia, Spain), Israel Martin-Escalona (Technical University of Catalonia, Spain), Francisco Barcelo (Technical University of Catalonia, Spain)

#### SA05-2: Performance Implications of Pareto-distributed Cell Residual Time in Distributed Admission Control Scheme (DACS)

S. Thajchayapong (Carnegie Mellon University, USA), O. K. Tonguz (Carnegie Mellon University, USA)

#### SA05-3: Dynamic Packet Scheduling for cdma2000 1xEV-DO Broadcast and Multicast Services

Kyungtae Kang (Seoul National University, Korea), Jinsung Cho (Kyung Hee University, Korea), Heonshik Shin (Seoul National University, Korea)

#### SA05-4: A Dummy Segment based Bandwidth Probing Technique to Enhance the Performance of TCP over Heterogeneous Networks

Tarik Taleb (Tohoku University, Japan), Kenichi Kashibuchi (Tohoku University, Japan), Nei Kato (Tohoku University, Japan), Yoshiaki Nemoto (Tohoku University, Japan)

## Wednesday, March 16, 2005

14:00 - 15:30 Room 205

### SA06: Network Architecture Design

#### SA06-1: A Consolidated Architecture for 4G/B3G Networks

M. Rubaiyat Kibria (The University of Sydney, Australia), Vinod Mirchandani (The University of Sydney, Australia), Abbas Jamalipour (The University of Sydney, Australia)

#### SA06-2: A Lightweight Pervasive Architecture for Fieldwork Environments

Thienne Johnson (Universidade Federal de Pernambuco, Brazil), Djamel Sadok (Universidade Federal de Pernambuco, Brazil)

#### SA06-3: Design and Implementation of an Architecture Supporting Mobile CORBA Servants under Intermittent Connectivity Environment

Mayank Mishra (Persistent Systems Private Ltd., India), Sanjay Chaudhary (Dhirubhai Ambani Institute of Information and Communication Technology, India)

**SA06-4: Integrated Networking Technologies for a Survivable Network**

J. Chennikara-Varghese (Telcordia Technologies, Inc., USA), A. Dutta (Telcordia Technologies, USA), A. Cheng (Telcordia Technologies, USA), D. Chee (Telcordia Technologies, Inc., USA), M. Elaoud (Telcordia Technologies, USA), T. McAuley (Telcordia Technologies, USA), I. Sebuktekin (Telcordia Technologies, USA), B. Kim (Telcordia Technologies, USA), K. D. Wong (Telcordia Technologies, USA), J. Burns (Telcordia Technologies, USA), M. Yajnik (Telcordia Technologies, USA), L. Wong (Telcordia Technologies, USA), K. Young (Telcordia Technologies, USA), Henning Schulzrinne (Columbia University, USA)

**Wednesday, March 16, 2005**

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**SA07: Service Accountability**

**SA07-1: An AAA based Service Customization Framework for Public WLANs**

Farooq Bari (AT&T Wireless Services, USA)

**SA07-2: Sequential Aggregate Signatures for Wireless Routing Protocols**

Huafei Zhu (Institute for Infocomm Research, Singapore), Feng Bao (Institute for Infocomm Research, Singapore), Tiejian Li (Institute for Infocomm Research, Singapore), Yongdong Wu (Institute for Infocomm Research, Singapore)

**SA07-3: A Simple Approach to Charging and Billing of Packetized Applications**

Gülfem I\_iklar (Bo\_aziçi University, Turkey), Ay\_e Ba\_ar Bener (Bo\_aziçi University, Turkey)

**SA07-4: Service Survivability in Wireless Networks via Multi-Layer Self-Healing**

Latha Kant (Telcordia Technologies Inc., USA), Wai Chen (Telcordia Technologies Inc., USA)

**Wednesday, March 16, 2005**

16:00 - 17:30 Room 205

**SA08: Cellular System Services**

**SA08-1: Mapping of File-Sharing onto Mobile Environments: Feasibility and Performance of eDonkey with GPRS**

Tobias Hoffeld (University of Würzburg, Germany), Kurt Tutschku (University of Würzburg, Germany), Frank-Uwe Andersen (Siemens AG, Germany)

**SA08-2: Access to IP Multimedia Subsystem of UMTS via PacketCable Network**

Mehdi Mani (Institut National des Telecommunications, France), Noël Crespi (Institut National des Telecommunications, France)

**SA08-3: A Proxy-based Framework to Enhance User Level Performance of GPRS/UMTS Networks**

Yue Wang (Tsinghua University, P.R. China), Junxiu Lu (Tsinghua University, P.R. China), Yong Ren (Tsinghua University, P.R. China), Xiuming Shan (Tsinghua University, P.R. China), Yonghua Song (Brunel University, UK)

**SA08-4: IMS-based Push-to-Talk over GPRS/UMTS**

Peter Kim (Siemens AG, Germany), Andras Balazs (Siemens AG, Germany), Eddy van den Broek (Siemens AG, Germany), Gerhard Kieselmann (Siemens AG, Germany), Wolfgang Böhm (Siemens AG, Germany)

**Thursday, March 17, 2005**

9:00 - 10:30 Room 205

**SA09: Personal and Indoor Services**

**SA09-1: A Novel Scheduling Scheme and MAC Enhancements for IEEE 802.15.3 High-Rate WPAN (invited paper)**

RanRan Zeng (Beijing University of Posts and Telecommunications, China), Geng-Sheng Kuo (National Chengchi University, Taiwan)

**SA09-2: Practical Device Association Protocols for Wireless enabled Personal Devices**

A. Lakshminarayanan (Institute for Infocomm Research, Singapore), Huafei Zhu (Institute for Infocomm Research, Singapore)

**SA09-3: Map-aided Indoor Mobile Positioning System using Particle Filter**

Frédéric Evennou (France Telecom R&D, France), François Marx (France Telecom R&D, France), Emil Novakov (IMEP, France)

**SA09-4: HTTP Compression Techniques**

Zhigang Liu (Nokia Research Center, USA), Yousuf Saifullah (Nokia Research Center, USA), Marc Greis (Nokia Research Center, USA), Srinivas Sreemanthula (Nokia Research Center, USA)

**Thursday, March 17, 2005**

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**SA10: Wireless Services**

**SA10-1: Implementing a Wireless Application in a Developing Country**

J. G. McDaniel (University of Victoria, Canada), E. Slaweki (Canadian Society for International Health, Canada)

**SA10-2: Aerouter™—A Graphical Simulation Tool for Routing in Aeronautical Systems**

Ehssan Sakhaee (The University of Sydney, Australia), Abbas Jamalipour (The University of Sydney, Australia)

**SA10-3: Dynamic End-to-End Image Adaptation for Guaranteed Quality of Service in Wireless Image Data Services**

Dong-Gi Lee (University of California, San Diego, USA), Sujit Dey (University of California, San Diego, USA)

**SA10-4: On the Use of Notch Filters and Ordered Co-channel TDMA Slots Strategies to the TDMA and CDMA Overlaid Systems**

Josefina Castañeda-Camacho (CINVESTAV-IPN, Mexico), Domingo Lara-Rodríguez (CINVESTAV-IPN, Mexico)

**Thursday, March 17, 2005**

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**SA11: Location and Mobility Tracking**

**SA11-1: An Enhanced Received Signal Level Cellular Location Determination Method via Maximum Likelihood and Kalman Filtering**

Ioannis G. Papageorgiou (University of Cyprus, Cyprus), Charalambos D. Charalambous (University of Cyprus, Cyprus), Christos Panayiotou (University of Cyprus, Cyprus)

**SA11-2: Analysis and Implementation of a Novel Single-Channel Direction-Finding Method**

Nathan Harter (Virginia Polytechnic Institute and State University, USA), John J. Keaveny (Virginia Polytechnic Institute and State University, USA), Swaroop Venkatesh (Virginia Polytechnic Institute and State University, USA), R. Michael Buehrer (Virginia Polytechnic Institute and State University, USA)

**SA11-3: Rate Control for Streaming Services Based on Mobility Prediction in Wireless Mobile Networks**

Chunglae Cho (Electronics and Telecommunications Research Institute, Korea), Sun-mi Jun (Electronics and Telecommunications Research Institute, Korea), Euihyun Paik (Electronics and Telecommunications Research Institute, Korea), Kwang-Roh Park (Electronics and Telecommunications Research Institute, Korea)

**SA11-4: Selection of Diversity and Modulation Parameters for Nakagami Fading Channels to Jointly Satisfy Outage and Bit Error Requirements**

P. Sharma (University at Buffalo, USA)