

SERVICES AND APPLICATIONS

MONDAY 3 APRIL 2006
9:00-10:30 ROOM N241

SA01: STREAMING IN WIRELESS NETWORKS

Session Chair: Shigeru Shimamoto, Waseda University

SA01-1: Video Stream Authentication in Lossy Networks

Yongdong Wu, Institute for Infocomm Research, Singapore; Tieyan Li, Institute for Infocomm Research, Singapore

SA01-2: Adaptive Audio-Video Streaming Solution over IP Mobile Environments

Daniel Negru, University of Versailles, France; Toufik Ahmed, University of Bordeaux I, France

SA01-3: A New Smooth Handoff Scheme for Mobile Multimedia Streaming using RTP Dummy Packets and RTCP Explicit Handoff Notification

Kenichi Kashibuchi, Tohoku University, Japan; Tarik Taleb, Tohoku University, Japan

SA01-4: A Dynamic Geographic Hash Table for Data-Centric Storage in Sensor Networks

Thang Nam Le, The Ohio State University, USA; Wei Yu, Texas A&M University, USA

MONDAY 3 APRIL 2006
11:00-12:30 ROOM N241

SA02: WIRELESS SENSORS SERVICES

Session Chair: Tarik Taleb, Tohoku University, Japan

SA02-1: A Quality-Guaranteed and Energy-Efficient Query Processing Algorithm for Sensor Networks

Qingchun Ren, University of Texas at Arlington, USA; Qilian Liang, University of Texas at Arlington, USA

SA02-2: Reliability Enhancements for Environment Monitoring Using Wireless Sensor Networks

Yuan Guo, University of Florida, USA; Janise McNair, University of Florida, USA

SA02-3: Fundamental Performance Analysis of Event Detection in Wireless Sensor Networks

Haining Shu, University of Texas at Arlington, USA; Qilian Liang, University of Texas at Arlington, USA

SA02-4: A PCA-based Vehicle Classification System in Wireless Sensor Networks

Yang Sun, The University of Mississippi, USA; John N. Daigle, The University of Mississippi, USA

MONDAY 3 APRIL 2006
14:00-15:30 ROOM N241

SA03: WIRELESS AD HOC SERVICES

Session Chair: Nei Kato, Tohoku University, Japan

SA03-1: An Efficient Vehicle-Heading based Routing Protocol for VANET Networks

Tarik Taleb, Tohoku University, Japan; Mitsuru Ochi, Tohoku University, Japan

SA03-2: Implementation of Group Member Authentication Protocol in Mobile Ad-hoc Networks

Hitoshi Asaeda, Keio University, Japan; Musfiq Rahman, Asian Institute of Technology, Thailand

SA03-3: An Integrated Solution to Delay and Security Support in Wireless Ad Hoc Networks

Wenbo He, University of Illinois at Urbana-Champaign, USA; Klara Nahrstedt, University of Illinois at Urbana-Champaign, USA

SA03-4: A Constrained Resource Allocation Study for LOS MIMO Fading Ad-Hoc Networks

Homayoun Yousefi'zadeh, University of California, Irvine, USA

MONDAY 3 APRIL 2006
16:00-17:30 ROOM N241

SA04: PERVASIVE APPLICATIONS

Session Chair: Ahmad Hatami, Worcester Polytechnic Institute, USA

SA04-1: P2P Applications on Smart Phones using Cellular Communications

Balázs Bakos, Nokia Hungary kft., Hungary; Lóránt Farkas, Nokia Hungary kft., Hungary

SA04-2: An Efficient Runtime Offloading Approach for Pervasive Services

Shumao Ou, University of Essex, UK; Kun Yang, University of Essex, UK

SA04-3: Throughput Performance of a Wireless VoIP Model with Packet Aggregation in IEEE 802.11

Mustafa Ergen, University of California, Berkeley, USA; Sinem Coleri Ergen, University of California, Berkeley, USA

WCNC 2006 TECHNICAL SESSIONS SERVICES AND APPLICATIONS

SA04-4: Novel Communication Services Based on Human Body and Environment Interaction: Applications inside Trains and Applications for Handicapped People

Jordi Agud Ruiz, Waseda University, Japan; Shigeru Shimamoto, Waseda University, Japan

**TUESDAY 4 APRIL 2006
9:00-10:30 ROOM N241**

SA05: WIRELESS LOCATION MANAGEMENT

Session Chair: *Vincent Wong, University of British Columbia, Canada*

SA05-1: Cellular Geolocation Employing Hybrid of Relative Signal Strength and Propagation Delay

Bo-Chieh Liu, National Sun Yat-Sen University, Taiwan; Ken-Huang Lin, National Sun Yat-Sen University, Taiwan

SA05-2: A Future Location-Prediction Replacement Strategy for Mobile Environments

Stylianios Drakatos, Florida International University Miami, USA; Niki Pissinou, Florida International University Miami, USA

SA05-3: A Cell Planning Scheme along Railway Tracks in CDMA Systems

Shinobu Nanba, KDDI R&D Laboratories, Inc., Japan; Xiaoqiu Wang, KDDI R&D Laboratories, Inc., Japan

SA05-4: On RSS and TOA -based Indoor Geolocation—A Comparative Performance Evaluation

Ahmad Hatami, Worcester Polytechnic Institute, USA; Kaveh Pahlavan, Worcester Polytechnic Institute, USA

**TUESDAY 4 APRIL 2006
11:00-12:30 ROOM N241**

SA06: SERVICE PERFORMANCE ANALYSIS

Session Chair: *Homayoun Yousefi-zadeh, University of California, Irvine, USA*

SA06-1: Experimental Evaluation of Application Performance with 802.11 PHY Rate Adaptation Mechanisms in Diverse Environments

Yi Yang, University of California, Los Angeles, USA; Mahesh Marina, University of California, Los Angeles, USA

SA06-2: Throughput Optimization of Cooperative UAVs Using Adaptive Channel Assignment

Ibrahim Y. Abualhaol, The University of Mississippi, USA; Mustafa M. Matalgah, The University of Mississippi, USA

SA06-3: A Terminal-based Location Service Enabler for the IP Multimedia Subsystem

Rudolf Pailer, Mobilkom Austria AG & Co KG, Austria; Florian Wegscheider, Telecommunications Research Center Vienna, Austria; Sandford Bessler, Telecommunications Research Center Vienna, Austria

SA06-4: Evaluation of a Pastry-based P2P Overlay for Supporting Vertical Handover

Tobias Hoßfeld, University of Würzburg, Germany; Simon Oechsner, University of Würzburg, Germany; Kurt Tutschku, University of Würzburg, Germany; Frank-Uwe Andersen, Siemens AG, Germany

**TUESDAY 4 APRIL 2006
16:00-17:30 ROOM N241**

SA07: SERVICE RELIABILITY AND MANAGEMENT

Session Chair: *Yingyue Xu, Intelligent Automation, Inc., USA*

SA07-1: Building Semantically Rich Network Management Interfaces

Boris Danev, Ericsson R&D, Ireland; David Cleary, Ericsson R&D, Ireland

SA07-2: Diameter-based Accounting Management for Wireless Services

Frank Eyermann, University of Federal Armed Forces Munich, Germany; Peter Racz, University of Zurich, Switzerland; Burkhard Stiller, University of Zurich, Switzerland; Christian Schaefer, DoCoMo Euro-Labs, Germany; Thomas Walter, DoCoMo Euro-Labs, Germany

SA07-3: A Method to Minimize the Blocking Probability for Heterogeneous Traffic Flows

Xian Liu, University of Arkansas at Little Rock, USA

SA07-4: Cluster Sizing and Head Selection for Efficient Data Aggregation and Routing in Sensor Networks

Hao Chen, University of Wisconsin-Madison, USA; Seapahn Megerian, University of Wisconsin-Madison, USA

**THURSDAY 6 APRIL 2006
16:00-17:30 ROOM N241**

SA08: SERVICE DEVELOPMENT

Session Chair: *Xian Liu, University of Arkansas at Little Rock, USA*

SA08-1: Mobile Agent Migration Algorithms for Collaborative Processing

Yingyue Xu, Intelligent Automation, Inc., USA; Hairong Qi, The University of Tennessee, USA

SA08-2: A 5 GHz CMOS Low Noise Amplifier with a 3.25 Turn Spiral Inductor for IEEE 802.16a

Fatemeh Kalantari, Tehran University, Iran; Nasser Masoumi, Tehran University, Iran; Nafiseh Gholampour, Tehran University, Iran; Roghayeh Saeidi, Tehran University, Iran

SA08-3: Estimating Network Internal Link Loss Behavior From End-to-End Multi-cast Measurements

Sinem Coleri Ergen, University of California, Berkeley, USA; Mustafa Ergen, University of California, Berkeley, USA; Pravin Varaiya, University of California, Berkeley, USA

SA08-4: Time-Tag Based Efficient Information Access

Raziq Yaqub, Toshiba America Research, Inc.; Sunil Madhani, Motorola