International Symposium on Applications and the Internet - SAINT 2007 Workshops

Workshop Co-Chairs
Ling Liu, Atsuhiro Goto

Workshop on Next Generation Service Platforms for Future Mobile Systems (SPMS 2007)

Date: January 16, Tuesday, 9:00-17:30
Room: Cosmos 1

Opening (9:00-9:05)
Welcome note by WS Organizers
Wolfgang Kellerer

Session 1: Peer-to-Peer and Sensor Network Service Platforms (9:05 - 9:55)
Session Chair: Stefan Arbanowski (Fraunhofer FOKUS, Germany)

Invited Talk: Zero-programming Sensor Network Deployment
Karl Aberer, Manfred Hauswirth, Ali Salehi

Towards a Mobile Peer-to-Peer Service Platform
Wolfgang Kellerer, Zoran Despotovic, Maximilian Michel, Stefan Zoels, Quirin Hofstaetter

Session 2: Context Awareness (9:55-10:40)
Session Chair: Wolfgang Kellerer (DoCoMo Euro-Labs, Germany)

A Privacy-aware Context Discovery System for Next Generation Mobile Services
Cristian Hesselman, Henk Eertink, Martin Wibbels

Managing and Delivering Context-Dependent User Preferences in Ubiquitous Computing Environments
Michael Sutterer, Olivier Coutand, Olaf Droegehorn, Klaus David

Coffee Break (10:40-11:00)

Session 3: Service Architectures and IMS evolution (11:00-12:30)
Session Chair: Masayoshi Ohashi (KDDI, Japan)

Dynamic Community Entertainment Services Composition on Next Generation Mobile Network IP Multimedia Subsystem
Yasuhiro Araki, Akio Yamamoto, Michael Sweeney

SPICE: Evolving IMS to Next Generation Service Platforms
Sasu Tarkoma, Christian Prehofer, Anna V. Zhdanova and Klaus Moessner, Ernoe Kovacs

Development and Publication of Generic Middleware Components for the Next Generation Mobile Service Platform
Bharat Bhushan, Anthony Tarlano, Gerhard Fischer, Jos Hendriks

Managing Variability of Mobile Value Added Service in Framework
Huang Xingping, Xu Peng, Yang Fangchun

Lunch (12:30-13:30)

Session: Invited Talk (13:30-14:00)
Session Chair: Klaus David (Univ. of Kassel, Germany)

Invited Talk: Solutions for a Service Architecture in pervasive environments based on WWRF WG2 Requirements
Klaus David, Mika Klemettinen

Session 4: Next Generation Service Delivery (14:00-15:15)
Session Chair: Klaus David (Univ. of Kassel, Germany)

Evolution of Next Generation Networks towards an integrated platform for IMS-based IPTV services
Oliver Friedrich, Adel Al-Hezmi, Stefan Arbanowski, Thomas Magedanz

QoS Mapping and Adaptation in Next Generation Networks
E. Cerqueira, T. Sousa, A. Neto, L. Veloso, M. Curado, E. Monteiro, P. Mendes

Reconfigurable systems with a user-centric focus
Giovanni Bartolomeo, Stefano Salsano, Nicola Blefari-Melazzi

Coffee Break (15:15-15:45)

Session 5: Mobile Applications (15:45-17 :30)
Session Chair: Mitsuru Uesugi (Panasonic, Japan)

Marauder's Map - Bringing People Together
Raja Bose, Hen-I Yang, Sumi Helal

Privacy Management for Context Transponders
Michael Fahrmair, Wassiou Sitou, Bernd Spanfelner

Context-Aware Query Refinement for Mobile Web Search
Shun Hattori, Taro Tezuka and Katsumi Tanake

MIDEA: Management of Disposable E-Mail Addresses for Mobile Systems
Daisuke Ochi

Workshop on Networked RFID

Date: January 17, Wednesday, 11:00-17:00
Room: Ran 1

Opening
Welcome note by WS Organizers
Osamu Nakamura, Hao Min, Sang-Gug James Lee

Session 1: RFID empowered Business (11:00-12:30)
Session Chair: Sang-Gug Lee (ICU)

Customer Loyalty Based Dynamic Pricing by Using RFID-enabled Floor Level Sales Information
Tatsuya Inaba

The achievement of Hibiki Project - for the spread use of RFID -
Atsushi Honzawa, Yuichi Kobayashi, Shinichirou Fukushima, Takanori Yamazoe

Transportation quality monitor using sensor active RFID
Kohei Mizuno and Masashi Shimizu

Lunch (12:30-14:00)

Session 2: Invited Talk (14:00-15:00)
Session Chair: Osamu Nakamura (Keio University)

Invited Talk: Appliance defined ubiquitous network
Haruhisa Ichikawa, Masashi Shimizu and Kazunori Akabane

Coffee Break (15:00-15:30)

Session 3: RFID wireless system (15:30-17:00)
Session Chair: Hao Min (Fudan University)

A Multi-Carrier UHF Passive RFID System
Hsin-Chin Liu, Yung-Ting Chen, and Wen-Shin Tzeng

Investigation of the Threshold of Second Carrier Sensing in RFID Deployment
Kin Seong Leong, Mun Leng Ng, Peter H. Cole

A System to Test the Performance of RFID-Tagged Objects
Hugo Mallinson, Steve Hodges, Alan Thorne

Multipath Identification using Steepest Gradient Method for Dynamic Inventory in UHF RFID
Jin Mitsugi and Yu Shibao

Workshop on Middleware Architecture in the Internet

Date: January 15, Monday, 13:00-18:30
Room: Cosmos 1

Opening Address (13:00-13:20)
Session Chair: Kenji Fujikawa (Root, Inc)

Welcome note by WS Organizers
  Yasuo Okabe

Middleware Architecture in the Internet: Introduction
  Keith Hazelton

Session1: Authentication and Authorization (13:20-15:00)
Session Chair: Kenji Fujikawa (Root, Inc)

Attribute Aggregation and Federated Identity
  Nate Klingenstein

Multiple-tiered Security Hierarchy for Web Applications
  Hisashi Naito, Shoji Kajita, Yasushi Hirano, Kenji Mase

A Privacy Oriented Extension of Attribute Exchange in Shibboleth
  Shoichirou FUJIWARA, Takaaki KOMURA, Yasuo OKABE

Simple and Secure Authentication Escrow for Rights Trading Protocol
  Keiichi Hirota, Noboru Sonehara

Coffee Break (15:00-15:30)

Session 2: Middleware for Network Management, Applications and Grid (15:30-18:30)
Session Chair: Yasuo Okabe (Kyoto University)

A Policy-based, Secure Access Control Mechanism for Network Roaming Infrastructures
  Tetsuo Imai, Hideaki Goto, Hideaki Sone

Application for a Simple Device Authentication Framework: Device Authentication Middleware using Novel Smart Card Software
  Manabu Hirano, Takeshi Okuda, Suguru Yamaguchi

Development of Management Interface to Configure Network Equipment
  Tomoyuki Iijima, Kunihiko Toumura, Hiroyasu Kimura, Makoto Kitani, Takahisa Miyamoto

A Generic API for Retrieving Human-oriented Information from Social Network Services
  Teruaki Yokoyama, Shigeru Kashihara, Takeshi Okuda, Youki Kadobayashi, Suguru Yamaguchi

Peer-to-Peer Scheduling System with Scalable Information Sharing Protocol
  Norihiro Umeda, Hidemoto Nakada, Satoshi Matsuoka

A Report of Campus-wide IT Authentication Platform System Developement in Osaka University
  Toyokazu Akiyama, Yuuichi Teranishi, Shingo Okamura, Eisaku Sakane, Go Hasegawa, Ken-ichi Baba, Hirotaka Nakano, Shinji Shimojo

Data Management on Grid Filesystem for Data-Intensive Computing
  Hitoshi Sato, Satoshi Matsuoka

Workshop on Educational Challenges to Deploy the Internet

Date: January 15, Monday, 13:00-17:30
Room: Cosmos 2

Opening
Welcome note by WS Organizers
Hideki Sunahara, Kaori Maeda, Kenzi Watanabe, Keiko Okawa, Yasuo Tsuchimoto

Session 1: Development of Tools for Distance Classroom (13:00-15:00)
Session Chair: Kenzi Watanabe (Saga University)

Bandwidth Adjustable DVTS on the Heterogeneous Internet Environments for Distance Learning
Yasuo Tsuchimoto, Mohammad Abdul Awal, Poompat Saengudomlert, Teerapat Sanguankotchakorn, Kanchana Kanchanasut

A Remote Hands-on Exercise Environment for an Asia-wide Real-time Workshop
Achmad Basuki, Achmad H. Thamrin, Keiko Okawa, Jun Murai

An active viewing system to utilize streaming video for education
Masahiro Yachi, Jun Murai

Coffee Break (15:00-15:30)

Session 2: Collaborative Education over the Internet (15:30-17:30)
Session Chair: Hideki Sunahara (Nara Institute of Science and Technology)

SMART CLASSROOMS BRING TOP-QUALITY EDUCATION AROUND THE GLOBE
Davar Pishva

An Asia-Wide Realtime Distributed Hands-On Workshop
Shoko Mikawa, Patcharee Basu, Keiko Okawa, Jun Murai

Cooperation Activity for Leaders of the Next Generation Internet
Tohru Kondo, Atsushi Hikita

Advanced Experiments to Educate Technical High School Students for Creation of Ubiquitous Networked Society
Kazuhisa Taniguchi, Ryuji Kaneda, Mika Kunishige, Aki Kojiri, Kaori Maeda, Reiji Aibara

Workshop on Network Mobility (WONEMO)

Date: January 15, Monday, 13:00-17:30
Room: Ran 1

Opening
Welcome note by WS Organizers
Ryuji Wakikawa (Keio U), Thierry Ernst (INRIA)

Session 1: Experimentation and Testbed (13:00-15:00)
Session Chair: Keiichi Shima (IIJ)

Invited Talk: Dependable Mobile Internet: Connecting Ambulance to the Internet
Hideki Sunahara

ANEMONE: A Pan-European Testbed to Validate IPv6 Mobility Technologies
László Bokor, Nicolas Montavont, Paolo Di Francesco, Thierry Ernst

Vehicle Communication Experiment Environment With MANET And NEMO
Manabu Tsukada, Thierry Ernst

Deploying reliable IPv6 temporary networks thanks to NEMO Basic Support and Multiple Care-of Addresses registration
Romain Kuntz

Coffee Break (15:00-15:30)

Session 2: New Technology (15:30-17:30)
Session Chair: Thomas Noel (University Louis Pasteur at Strasbourg)

Advances in MANEMO: Definition of the Problem Domain and the Design of a NEMO-Centric Approach
B. McCarthy, C. Edwards, M. Dunmore

A HIP based Network Mobility Protocol
Szabolcs Nováczki, László Bokor, Sándor Imre

Multihoming in Nested Mobile Networks with Route Optimization
DELEPLACE Angeline, Thierry Ernst, Thomas Noel

Invited Talk: NEMO Based Communications for the Automotive Industry
Thierry Ernst (INRIA)

Workshop on Ubiquitous Networking and Enablers to Context-Aware Services

Date: January 15, Monday, 13:00-17:30
Room: Ran 2

Opening
Welcome note by WS Organizers
Shinji Shimojo

Session 1: New Types of Services in Ubiquitous Network Era (13:00-15:00)
Michiharu Takemoto (NTT Network Service Systems Labs.)

RFID Supplement for Mobile-Based Life Log System
Atsunori Minamikawa, Nobuhisa Kotsuka, Masaru Honjo, Daisuke Morikawa, Satoshi Nishiyama, Masayoshi Ohashi

Nazca: A Geographic Location Service
Mio Suzuki, Teruaki Yokoyama, Takuji Iimura, Shigeru Kashihara, Takeshi Okuda, Suguru Yamaguchi

Mobile Media Content Sharing in UPnP-Based Home Network Environment
Wei-Shun Liao, Yen-Ju Huang, Chih-Lin Hu

An Extended AND Operations for Retrieving a Flexible Information Unit from Tree Structured Data
Taira Yoda, Hidenari Kiyomitsu, Kazuhiro Ohtsuki, Jun-ya Morishita

Coffee Break (15:00-15:30)

Session: New Service Enablers for Ubiquitous Network (15:30-17:30)
Masayoshi Ohashi (KDDI)

A P2P-based Mechanism for Managing Location-dependent Contents in Ubiquitous Environments
Tomoya Kawakami, Susumu Takeuchi, Yuuichi Teranishi, Kaname Harumoto, Shinji Shimojo

Topology Re-formation Algorithms for Ubiquitous P2P Networks Based on Response Statistics
Hirokazu Nakano, Kaname Harumoto, Shojiro Nishio

Instant Learning Sound Sensor for Ubiquitous Computing
Yuya Negishi, Nobuo Kawaguchi

A Novel Unambiguous Multipath Mitigation Scheme for BOC(kn; n) Tracking in GNSS
Sanghun Kim, Seungsoo Yoo, Seokho Yoon, Sun Yong Kim

Workshop on Dependable and Sustainable Peer-to-Peer Systems

(DAS-P2P 2007)

Date: January 16, Tuesday, 9:00-17:30
Room: Cosmos 2

Opening
Welcome note by WS Organizers
Yusuke Doi, Youki Kadobayashi, Kenji Saito

Session 1: PC Session (9:00-10:30)
Session Chair: Kenji Saito (Keio University)

Invited Talk: Means for P2P Research.
Kazuyuki Shudo

Local Production, Local Consumption Peer-to-Peer Architecture for a Dependable and Sustainable Social Infrastructure
Kenji Saito, Eiichi Morino, Yoshihiko Suko, Takaaki Suzuki, Jun Murai

Creating and Managing Service Level Agreement Networks
Omer Rana, Kenji Saito

Coffee Break (10:30-11:00)

Looking Back DAS-P2P 2006 (11:00-11:20)

Session 2: System and Measurement (11:20-12:10)
Session Chair: Youki Kadobayashi (Nara Institute of Science and Technology)

CHOP6: A DHT Routing Mechanism
Shouta Morimoto, Fumio Teraoka

N-TAP: A Platform of Large-scale Distributed Measurement for Overlay Network Applications
Kenji Masui, Youki Kadobayashi

Lunch (12:10-14:00)

Session 3: Geological P2P (14:00-15:15)
Session Chair: Yusuke Doi (TOSHIBA Corporation)

Overlay Network Considering the Time and Location of Data Generation
Shinichi Doi, Satoshi Matsuura, Kazutoshi Fujikawa, Hideki Sunahara

Content Cruising System under Dense Region of Mobile Nodes
Takaaki Ishida, Masayoshi Imaike

Gippy: Campus GIS Information System Supported by P2P
Fengyuan XU, Zhiyi FANG

Coffee Break (15:15-16:00)

Session 4: Society and Trust (16:00-16:50)
Session Chair: Omer Rana (Cardiff University)

Proposal of construction PKI on overlay network
Yukio OKADA, Hiroaki HAZEYAMA, Youki KADOBAYASHI

Peer-to-Peer Economics for Post Catastrophic Recovery
Yoshihiko Suko, Eiichi Morino, Susumu Takahashi, Takaaki Suzuki, Kenji Saito, Jun Murai

Session 5 (Panel) : Talking Circle: Towards Dependable and Sustainable P2P (16:50-17:30)
Session Chair: Kenji Saito (Keio University)

Panelist:
Kazuyuki Shudo, Youki Kadobayashi, Yusuke Doi, Omer F. Rana, Kenji Saito

Workshop on Practical Applications of Sensor Networking

Date: January 16, Tuesday, 9:30-17:00
Room: Ran 1

Opening
Welcome note by WS Organizers
Hiroshi Esaki

Session 1: Large Scale Sensor Network System Deployment (9:30-10:45)
Session Chair: Hiroshi Esaki (The Univ. of Tokyo, Japan)

Smart Parking: an Application of optical Wireless Sensor Network
Jatuporn Chinrungrueng, Udomporn Sunantachaikul, Satien Triamlumlerd

Live E! Project: establishment of infrastructure sharing environmental information
Satoshi Matsuura, Hiroki Ishizuka, Hideya Ochiai, Shinichi Doi, Shinichi Ishida, Masaya Nakayama, Hiroshi Esaki, Hideki Sunahara

Seamless Integration of Sensor Network and Legacy Weather Databases by MetBroker
Seishi Ninomiya, Takuji Kuira, Atsushi Yamakawa, Tokihiro Fukatsu, Kei Tanaka, Hongyan Meng, Masayuki Hirafuji

Coffee Break (10:45-11:15)

Session 2: Key Technologies in Sensor Networking (11:15-12:30)
Session Chair: Hideki Sunahara (Nara Institute of Science and Technology)

Massive Data Input System for Geographical Origin Identification System of Vegetables using Trace Element Compositions
Nobuyoshi Sato, Minoru Uehara, Koichiro Shimomura, Hirobumi Yamamoto, Kenichi Kamijo

Requirements for protection methods of personal information in vehicle probing system
Michiko Izumi, Masasaki Sato, Hideki Sunahara

Extending a Secure Autonomous Bootstrap Mechanism to Multicast Security
Nobuo Okabe, Shoichi Sakane, Kazunori Miyazawa, Kenichi Kamada

Coffee Break (12:30-14:00)

Session 3: Design and Evaluatin of Sensor Networking (14:00-15:15)
Session Chair: Hideki Sunahara (Nara Instutute of Science and Technlogy)

A Crop Field Remote Monitoring System Based on Web-server-embedded Technology and CDMA Service
Dongxian He, YouluBai, Yingzhe Wang, Hua Wu

Architecture of Scalable Embedded Device Management System with Configurable Plug-In Translator
Hideya Ochiai, Hiroshi Esaki

Application of Content-Based Network for Sensor Data Distribution System
Hideya Ochiai, Zhiyong Wang, Ryo Oguchi, Tetsuhiro Sugiyama, Yusuke Sakamoto, Shinichi Ishida, Hiroshi Esaki

Coffee Break (15:15-15:45)

Session 4: Practical Application on Agricultueal Field (15:45-17:00)
Session Chair: Hiroshi Esaki (The Univ. of Tokyo, Japan)

Field Server Projects
Masayuki Hirafuji, Takaharu Kameoka, Seishi Ninomiya

An Integrated Field Monitoring System for Sustainable and High-Quality Production of Agricultural Products Based on BIX Concept with Field Server
Atsushi Hashimoto, Ryoei to, Nobukazu Iguchi, Kenichi Nakanishi, Takashi Mishima, Toyokazu Hirozumi, Masayuki Hirafuji, Seishi Ninomiya, Takaharu Kameoka

Hierarchical Agent System for Web-based Sensor Network
Takuji Kiura, Tokihiro Fukatsu, Kei Tanaka, Masayuki Hirafuji

Workshop on Internet Measurement Technology and its Applications to

Building Next Generation Internet

Date: January 16, Tuesday, 9:00-17:30
Room: Ran 2

Opening
Welcome note by WS Organizers
Kensuke Fukuda, Masato Tsuru

Session 1: Large Scale Measurement (9:00-10:30)
Session Chair: Masato Tsuru

Invited Talk: Automatic Signature and Behavior Capture for Accurate Traffic Classification
Sue Moon

Evaluation of P2P-based Internet Measurement System on Loss Tolerance to Measurement Results
Atsushi Tagami, Teruyuki Hasegawa, Shigehiro Ano, Toru Hasegawa

Scalable QoS degradation locating from end-to-end quality of flows on various routes
Masayoshi Kobayashi, Tutomu Murase

Coffee Break (10:30-11:00)

Session 2: Traffic Analysis (11:00-12:45)
Session Chair: Masayoshi Kobayashi

Invited Talk: Statistical Sketch based Anomaly Detection and Validation using an Anomaly Database
Guillaume Dewaele, Pierre Borgnat, Patrice Abry

A study on detecting network anomalies using sampled flow statistics
Ryoichi Kawahara, Tatsuya Mori, Noriaki Kamiyama, Shigeaki Harada, Shoichiro Asano

A proposal of metrics for botnet detection based on its cooperative behavior
Mitsuaki Akiyama, Takanori Kawamoto, Masayoshi Shimamura, Teruaki Yokoyama, Youki Kadobayashi, Suguru Yamaguchi

2-D Bitmap for Summarizing Inter-Host Communication Pattern
Keisuke Ishibashi, Tatsuya Mori, Ryoichi Kawahara, Katsuyasu Toyama, Shunichi Osawa, Shoichiro Asano

Lunch (12:45-14:00)

Session 3: Passive Measurement (14:00-15:30)
Session Chair: Kenjiro Cho

Requirements for a standardized flow storage solution
Brian Trammell, Elisa Boschi, Lutz Mark, Tanja Zseby

Inferring original traffic pattern from sampled flow statistics
  Tatsuya Mori, Ryoichi Kawahara, Noriaki Kamiyama, Shigeaki Harada

Code Optimization for Packet Filters
  Yoshiyuki Yamashita, Masato Tsuru

Distributed Flow Monitoring Tool using Network Processor
  Yoshinori Kitatsuji, Satoshi Katsuno, Katsuyuki Yamazaki, Masato Tsuru, Yuji Oie

Coffee Break (15:30-16:00)

Session 4: QoS Monitoring and Control (16:00-17:30)
Session Chair: Kensuke Fukuda

Invited Talk: Path Selection Criteria for Peer-to-Peer Voice
  Cheng-Ying Ou, Chia-Li Huang, Cheng-Chun Lou, Ming-Tsang Tsai, Kuan-Ta Chen, Polly Huang

Diagnostic Method of TCP Packet Loss Segment From Sampled Packets
  Yasuhiro Yamasaki, Hideyuki Shimonishi, Tutomu Murase

Method of Measuring VoIP Traffic Fluctuation with Selective sFlow
  Atsushi Kobayashi, Katsuyasu Toyama