

Monday, March 29th, Pre-conference Workshops

- **Morning coffee break:** 10:00am – 10:30am
- **Afternoon coffee break:** 3:00pm – 3:30pm
- **Lunch break:** 12:00am – 1:30pm

CoMoRea 2010	The 7th IEEE Workshop on Context Modeling and Reasoning
IQ2S 2010	The Second International Workshop on Information Quality and Quality of Service for Pervasive Computing
MUCS 2010	7th International Workshop on Managing Ubiquitous Communications and Services
PerHealth 2010	First IEEE PerCom Workshop on Pervasive Healthcare
PerSeNS 2010	Sixth IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing
SESOC 2010	IEEE PerCom Workshop on SECurity and SOCial Networking
SmartE 2010	IEEE PerCom Workshop on Smart Environments
WoT 2010	First International Workshop on the Web of Things

CoMoRea 2010: The 7th IEEE Workshop on Context Modeling and Reasoning

Location: **Room O129**

Session 1 - Tutorial

8:30am - 10:00am

- CRT. **Overview of Context Modelling and Reasoning Techniques**
Jadwiga Indulska (University of Queensland), Daniela Nicklas (University Oldenburg), Anand Ranganathan (IBM), Daniele Riboni (University of Milan)

Session 2 – Context Modeling, Privacy, and Adaptation

10:30am - 12:00pm

- CR1. **Modeling of Sensor Data and Context for the Real World Internet**
Claudia Villalonga (SAP Research), Martin Bauer (NEC Lab Europe), Vincent Huang (Ericsson Research), Jesus Bernat (Telefonica I&D), Payam Barnaghi (University of Surrey)
- CR2. **A Flexible Context Stabilization Approach for Self-Adaptive Application**
Russel Nzekwa (INRIA), Romain Rouvoy, Lionel Seinturier (University of Lille 1)
- CR3. **An effective quality measure for prediction of context information**
Yves Vanrompay (Catholic University Leuven), Stephan Mehlhase (European Media Lab), Yolande Berbers (Catholic University Leuven)

Session 3 – Context Reasoning

1:30pm - 3:00pm

- CR4. **All for one or one for all? - Combining Heterogeneous Features for Activity Spotting**
Ulf Blanke, Bernt Schiele (TU Darmstadt), Matthias Kreil, Paul Lukowicz, Bernhard Sick, Thiemo Gruber (University of Passau)
- CR5. **Towards the Adaptive Integration of Multiple Context Reasoners in Pervasive Computing Environments**
Daniele Riboni, Linda Pareschi, Claudio Bettini (University of Milan)
- CR6. **HyCoRE: Towards a Generalized Hierarchical Hybrid Context Reasoning Engine**
Bridget Beamon, Mohan Kumar (University of Texas at Arlington)

Session 4 – Discussion

3:30pm - 4:15pm Trends and Challenges for future Context-aware Systems

IQ2S 2010: The Second International Workshop on Information Quality and Quality of Service for Pervasive Computing

Location: **Room O142**

Session 1 – Concepts & Mechanisms I

8:30am - 10:00am

- IQ1. **Analysis of Quality of Surveillance in Fusion-based Sensor Networks**
Rui Tan (City University of Hong Kong) , Guoliang Xing (Michigan State University), Xunteng Xu, and Jianping Wang (City University of Hong Kong)
- IQ2. **Supporting Multi-Fidelity-Aware Concurrent Applications in Dynamic Sensor Networks**
Nirmalya Roy, Vasanth Rajamani, and Christine Julien (UT-Austin)
- IQ3. **Faster Bayesian Context Inference by Using Dynamic Value Ranges**
Korbinian Frank, Patrick Robertson (DLR), Sergio Fortes Rodriguez, and Raquel Barco Moreno (University Malaga)

Session 2 – Keynote & Applications

10:30am - 12:15pm

- IQK. **Keynote: Processing and Analyzing Sensor Data Streams: Watch the Quality of Your Data**
Kai-Uwe Sattler (University of Ilmenau)
- IQ4. **BurrowView - Seeing the World through the Eyes of Rats**
Jó Ágila Bitsch Link, Gregor Fabritius, Muhammad Hamad Alizai, and Klaus Wehrle (RWTH Aachen University)
- IQ5. **Resilient Image Sensor Networks in Lossy Channels Using Compressed Sensing**
Scott Pudlewski, Arvind Prasanna, and Tommaso Melodia (State University of New York (SUNY) at Buffalo)

Session 3 – Concepts & Mechanisms II

1:30pm - 3:00pm

- IQ6. **Towards IEEE 802.15.4e: A Study of Performance Aspects**
Feng Chen, Reinhard German, and Falko Dressler (University of Erlangen)
- IQ7. **Accuracy over Energy Metrics for Evaluating Sensor Network MAC Protocols**
Nico Loose, and Hannes Frey (University of Paderborn)

IQ8. Exploring Quality in MultiSensor Pervasive Systems - A Localization Case Study

Stefano Bonetti (University of Bologna), Sharad Mehrotra, and Nalini Venkatasubramanian (University of California, Irvine)

Session 4 – Applications

3:30pm - 5:00pm

IQ9. Sorting the Wheat from the Chaff: Adaptive Sensor Selection for Context-aware Applications

Farid Zaid, Johannes Schmitt, Parag Mogre, Andreas Reinhardt, Matthias Kropff, and Ralf Steinmetz (TU Darmstadt)

IQ10. Target Tracking with Packet Delays and Losses -- QoI amid Latencies and Missing Data

Wei Wei (University of Massachusetts, Amherst), Ting He, Chatschik Bisdikian (IBM T. J. Watson Research Center), Dennis Goeckel (University of Massachusetts, Amherst), and Don Towsley (UMASS-Amherst)

IQ11. Collaborative Sensing to Improve Information Quality for Target Tracking in Wireless Sensor Networks

Wendong Xiao, Chen Khong Tham (Institute for Infocomm Research), and Sajal. K. Das (The University of Texas at Arlington)

MUCS 2010: 7th International Workshop on Managing Ubiquitous Communications and Services

Location: **Room O145**

Opening and Keynote Address

8:30am - 10:00am

MUO. **MUCS Opening**

Burkhard Stiller (University of Zurich) and Tom Pfeifer (Waterford Institute of Technology)

MUK. **Ubiquitous networking: get pervasively hacked**

Aiko Pras (University Twente)

Session 1 – Architectures, Modelling and Approaches

10:30am - 12:00pm

MU1. **An Architecture for Using Metadata to Manage Ubiquitous Communications and Services - A Position Paper**

John Strassner, Sung-Su Kim (POSTECH, Korea), Tom Pfeifer, Sven van der Meer (TSSG-WIT)

MU2. **Managing Ontology Based Integration Systems using Dependencies**

Aidan Boran (Alcatel-Lucent, Bell Labs), Declan O'Sullivan, Vincent Wade (Trinity College Dublin)

MU3. **Ontology Based Information Distribution in the Pervasive Display Environment**

JaeJeung Kim, Dongwon Lee, Bang Chul Jung (KAIST-IITC), Jinhyun Ahn (KAIST-CS)

MU4. **A Task-Oriented Approach to Support Spontaneous Interactions Among Users in Urban Computing Environments**

Angel Jimenez-Molina, Byung-Seok Kang, Jun-Sung Kim, In-Young Ko (KAIST-CS)

Session 2 – Sensing

1:30pm - 3:00pm

MU5. **Robopedia Leveraging Sensorpedia for Web-Enabled Robot Control**

Richard Edwards, Lynne Parker (University of Tennessee), David R. Resseguie (Oak Ridge National Lab)

MU6. **Comparison of Exact Static and Dynamic Bayesian Context Inference Methods for Activity Recognition**

Korbinian Frank (German Aerospace Center and Waterford IT), Matthias Röckl (German Aerospace Center), María Josefa Vera Nadales (University of Malaga), Patrick Robertson (German Aerospace Center), Tom Pfeifer (Waterford Institute of Technology)

- MU7. **Implementing the Draft W3C Semantic Sensor Network Ontology**
Daniel O'Byrne, Rob Brennan, Declan O'Sullivan (Trinity College Dublin)
- MU8. **Anomaly Detection in University Campus WiFi Zones**
Karolina Baras (University of Madeira), Adriano Moreira (University of Minho)

Session 3 – Testing and Evaluation

3:30pm - 4:15pm

- MU9. **DogSim: A State Chart Simulator for Domotic Environments**
Dario Bonino, Fulvio Corno (Politecnico of Turin)
- MU10. **On Assessment of Self-Adaptive Systems**
Stefan Taranu, Jens Tiemann (Fraunhofer FOKUS)

Session 4 – Workshop Interaction

4:15pm - 5:00pm

PerHealth 2010: First IEEE PerCom Workshop on Pervasive Healthcare

Location: **Room O131**

Welcome and Keynote Speech

8:45am - 10:00am

PHK. **Activity Recognition in Health Related Applications**

Paul Lukowicz (University of Passau)

Session 1 – Automated Activity Sensing and Detection

10:30am - 12:00pm

PH1. **iFall - a New Embedded System for the Detection of Unexpected Falls**

Ralf Salomon, Marian Lüder (University of Rostock), Gerald Bieber (Fraunhofer Institute for Computer Graphics)

PH2. **PerFallD: A Pervasive Fall Detection System Using Mobile Phones**

Jiangpeng Dai, Xiaole Bai, Zhimin Yang, Zhaohui Shen, Dong Xuan (The Ohio State University)

PH3. **Towards Wearable Sensing Based Assessment of Fluid Intake**

Oliver Amft (TU Eindhoven), David Bannach, Gerald Pirkl, Matthias Kreil, Paul Lukowicz (University of Passau)

Session 2 – Dynamic Information Management and Healthcare

1:30pm - 3:00pm

PH4. **Estimating personal energy expenditure with location data**

Simon Hay, Alastair R. Beresford (University of Cambridge)

PH5. **Studying the Utility of Tracking Systems in Improving Healthcare Workflow**

Eiman Elnahrawy, Richard Martin (Rutgers University)

PH6. **Teleo-Reactive Workflows for Pervasive Healthcare**

Srdjan Marinovic, Kevin Twidle, Naranker Dulay (Imperial College London)

Session 3 – Programming Models and Middleware Solutions

3:30pm - 5:30pm

PH7. **Efficient and Context-Aware Access Control for Pervasive Medical Sensor Networks**

Oscar Garcia Morchon (Philips Research Europe), Klaus Wehrle (RWTH Aachen University)

- PH8. **Adaptive Prompting based on Petri Net in a Smart Medication System**
Lei Tang, Xingshe Zhou, Zhiwen Yu (Northwestern Polytechnical University), Daqing Zhang (Institut Telecom Sud Paris), Hongbo Ni (Northwestern Polytechnical University)
- PH9. **Towards End User Programming for Mobile Healthcare Services by Event Driven Mashup**
Jia Jia Wen, Zhiguo Gao, Bo Yang, Ju Wei Shi, Liang Liang Dong, Yuan Bo Qin (IBM China Research Lab)
- PH10. **HIP: Health Integration Platform**
Jonathan Woodbridge, Hyduke Noshadi, Ani Nahapetian, Majid Sarrafzade (UCLA)

PerSeNS 2010: Sixth IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing

Location: **Room O148**

Opening and Keynote Speech

8:45am - 10:00am

- PSK. **In-Field Inspection of Sensor Networks**
Kay Roemer (University of Luebeck, Germany)

Session 1 – Networking Protocols

10:30am - 12:00pm

- PS1. **An Adaptive Algorithm for Dynamic Tuning of MAC Parameters in IEEE 802.15.4/ZigBee Sensor Networks**
M. Di Francesco (University of Texas at Arlington), G. Anastasi (University of Pisa), M. Conti (IIT-CNR), S. K. Das (University of Texas at Arlington), V. Neri (University of Pisa)
- PS2. **BACCARAT: a Dynamic Real-Time Bandwidth Allocation Policy for IEEE 802.15.4**
C. Nastasi, M. Marinoni, L. Santinelli, P. Pagano, G. Lipari, G. Franchino (Scuola Superiore S. Anna)
- PS.3 **Congestion Control and Fairness in Wireless Sensor Networks**
S. Brahma, M. Chatterjee (University of Central Florida), K. Kwiat (Air Force Research Lab)
- PS4. **Security Analysis of Reliable Transport Layer Protocols for Wireless Sensor Networks**
L. Buttyan, L. Csik (Budapest University of Technology and Economics)

Session 2 – Localization and Special Sensor Network Applications

1:30pm - 3:00pm

- PS5. **Enhancing SDP Generated Localization Solutions by the Removal of Anchorless Connected Components**
M. Ellebrecht (Garmin International), Z. Shah (Lahore University of Management Studies), M. Gann (Raytheon), S. Ali (Intel)
- PS6. **Concurrent scheduling in the Active Bat location system**
O. Woodman, R. Harle (University of Cambridge)

- PS7. **A Semi Distributed Localization Protocol for Wireless Sensor and Actor Networks**
G. Ghidini (University of Texas at Arlington), C. Pinotti (University of Perugia), S. K. Das (University of Texas at Arlington)
- PS8. **Profiling Sprints using On-Body Sensors**
S. Taherian, M. Pias, R. Harle, G. Coulouris, S. Hay, J. Cameron, J. Lasenby (University of Cambridge, UK), G. Kuntze, I. Bezodis, G. Irwin, D. Kerwin (Cardiff School of Sports, UK)

Session 3 – Energy – Aware Algorithms and Architectures

3:30pm - 5:00pm

- PS9. **Energy Efficient Sleep Scheduling in Wireless Sensor Networks Inspired by Satellite Behavior of Frogs**
A. Mutazono (Osaka University), M. Sugano (Osaka Prefecture University), M. Murata (Osaka University)
- PS10. **Fault Diagnosis in Multi Layered De Bruijn Based Architectures for Sensor Networks**
A. Taleb, J. Mathew, D. Pradhan (University of Bristol, UK)
- PS11. **Robust Hybrid Wired-Wireless Sensor Networks**
C. Alippi, L. Sportiello (Politecnico di Milano)
- PS12. **A System for Accurate Characterization of Wireless Sensor Networks with Power States and Energy Harvesting System Efficiency**
P. Glatz, L. Hoermann, C. Steger, R. Weiss (Graz University of Technology, Austria)

SESOC 2010: IEEE International Workshop on SECURITY and SOCIAL Networking

Location: **Room O133**

Session 1 – Keynote Speech 1

8:30am - 10:00am

- SCK1. **Research Agenda of Privacy in Online Social Networks**
Sonja Buchegger (KTH, Sweden)

Session 2 – Privacy preserving Online Social Networks

10:30am - 12:00pm

- SC1. **Secure and Flexible Framework for Decentralized Social Network Services**
Luca Maria Aiello, Giancarlo Ruffois (University of Turin)
- SC2. **Social-K: Real-Time K-Anonymity Guarantees for Social Network Applications**
Aaron Beach, Mike Gartrell, Richard Han (University of Colorado at Boulder)
- SC3. **Adding Privacy and Currency to Social Networking**
Jeremy Hansen (Center for Cryptography, Computer and Network Security)

Session 3 – Keynote Speech 2

1:30pm - 3:00pm

- SCK2. **Threats to the Social Web**
Ryan McGeehan (Facebook Inc.)

Session 4 – Securing Online Social Networking

3:30pm - 5:30pm

- SC4. **Privacy Assurance in Mobile Sensing Network: Go Beyond Trusted Servers**
Ling Hu, Cyrus Shahabi (University of Southern California)
- SC5. **Integrating people-centric sensing with social networks: A privacy research agenda**
Ioannis Krontiris, Felix Freiling (University of Mannheim)
- SC6. **Privacy-enhanced social network routing in opportunistic networks**
Iain Parris, Greg Bigwood, Tristan Henderson (University of St Andrews)
- SC7. **When Eco-IT meets security: Concealed Network Coding for Multicast Traffic**
Alban Hessler, Takahiro Kakumaru (NEC Europe Ltd.), Dirk Westhoff (HAW Hamburg)

SmartE 2010: IEEE PerCom Workshop on Smart Environments

Location: **Room O135**

Session 1 – Enabling Technologies and Architectures

10:30am - 12:00pm

- SE1. **A 3-Layer Architecture for Smart Environment Models**
Grzegorz Lehmann, Andreas Rieger, Marco Blumendorf, Sahin Albayrak (TU Berlin)
- SE2. **A Client Architecture for Market-Based Grid Integration of Smart Environments**
Harald Vogt, Holger Weiss (SAP Research)
- SE3. **Crowdsourced Radiomap for Room-Level Place Recognition in Urban Environment**
Minkyu Lee, Hyunil Yang, Dongsoo Han (KAIST), Chansu Yu (Cleveland University)

Session 2 – Interacting with the User

1:30pm - 3:00pm

- SE4. **Smart Lighting Using LED Luminaries**
Sachin Bhardwaj, Tanir Özcelebi, Johan Lukkien (Eindhoven University of Technology)
- SE5. **The Haptic Wheel: Vibro-tactile based Navigation for the Driving Environment**
Sungjae Hwang, Jung-hee Ryu (KAIST)
- SE6. **Owlspeak - Adaptive Spoken Dialogue within Intelligent Environments**
Tobias Heinroth, Dan Denich, Alexander Schmitt (Ulm University)

Session 3 – Digital Presence

3:30pm - 4:30pm

- SE7. **Privacy Butler: A Personal Privacy Rights Manager for Online Presence**
Ryan Wishart, Domenico Corapi, Anil Madhavapeddy, Morris Sloman (Imperial College London)
- SEP. **Plenary Discussion and Workshop Wrap-up**
All Participants

WoT 2010: First International Workshop on the Web of Things

Location: **Room O151**

Introduction Session

8:30am - 8:40am

Session 1 – RESTful Architecture for Things

8:40am - 10:00am

- WT1. **Architecture and Protocols for the Internet of Things: A Case Study**
Angelo Paolo Castellani (University of Padova), Nicola Bui (Consorzio Ferrara Ricerche), Paolo Casari, Michele Rossi (University of Padova), Zach Shelby (Sensinode Ltd.), Michele Zorzi (Consorzio Ferrara Ricerche)
- WT2. **Communication Architectures and Experiences for Web-Connected Physical Smart Objects**
Juan Ignacio Vazquez, Jonathan Ruiz-de-Garibay, Xabier Eguiluz, Iker Doamo (University of Deusto, Bilbao), Silvia Rentería, Ana Ayerbe (Robotiker-TECNALIA)
- WT3. **WebPlug: A Framework for the Web of Things**
Benedikt Ostermaier, Fabian Schlup, Kay Römer (ETH Zürich)

Session 3 – WS-* Services for Things

1:30pm - 2:20pm

- WT8. **Towards the Web of Things: Using DPWS to Bridge Isolated OSGi Platforms**
Oliver Dohndorf, Jan Krüger, Heiko Krumm (TU Dortmund University), Christoph Fiehe, Anna Litvina, Ingo Lück, Franz-Josef Stewing (MATERNA GmbH)
- WT9. **Web services on embedded systems - A performance study**
Christin Groba, Siobhan Clarke (Trinity College Dublin)

Session 4 – The Web of sensor networks

2:20pm - 3:55pm

- WT10. **Interaction Patterns for Bridging the Gap between Sensor Networks and the Sensor Web**
Arne Bröring (University of Muenste), Theodor Foerster (International Institute for Geo-Information Science and Earth Observation), Simon Jirka (52North Initiative for Open Source Software)

WT11. Early Lessons from Building Sensor.Network: an Open Data Exchange for the Web of Things

Vipul Gupta, Poornaprajna Udupi, Arshan Poursohi (Sun Microsystems Laboratories)

WT12. Towards a REST-style Architecture for Networked Vehicles and Sensors

José Pinto, Ricardo Martins, Joao Sousa (Porto University)

Session 5 - Demos

4:00pm - 5:00pm

WTD1. Globally interconnected WSAN testbeds

Lasse Thiem, Gabriele Goldacker, Mario Schuster, Thomas Luckenbach (Fraunhofer FOKUS), Byung Kyu Kim (National Information Society Agency)

WTD2. Sensor.Network: An Open Data Exchange for the Web of Things

Vipul Gupta, Arshan Poursohi, Poornaprajna Udupi (Sun Microsystems Laboratories)

WTD3. DPWS/OSGi integration

Jan Krüger, Oliver Dohndorf (TU Dortmund University)

WTD4. Mashup your Energy Consumption from your Android Mobile!

Dominique Guinard, Vlad Trifa, Azulena Guillen Aguilar (ETH Zürich & SAP)

Session 6 – Discussion Session and Wrap Up

5:00pm - 5:45pm

Tuesday, March 30th, PerCom Day-1

Opening Remarks

Auditorium

8:30am - 8:45am By PerCom Organizing Committee members

Keynote Lecture

Auditorium

8:45am - 10:00am **Large-scale Context Management**
Kurt Rothermel (University of Stuttgart, Germany)

Coffee/Tea break

Foyer

10:00am - 10:30am Coffee/Tea break

Session 1 – Pervasive and Mobile Applications

Auditorium

10:30am - 12:00pm Chair: **Daniela Nicklas** (Carl von Ossietzky Universitaet Oldenburg, Germany)

1A1. **Local Map Generation using Position and Communication History of Mobile Nodes**

Shinichi Minamimoto, Sae Fujii, Hirozumi Yamaguchi, Teruo Higashino (Osaka University, Japan)

1A2. **Interactive Streaming of Structured Data**

Justin Mazzola Paluska, Hubert Pham (MIT, USA)

1A3 **Opportunistic Web Access via WLAN Hotspots**

Mikko J. Pitkanen, Teemu Kärkkäinen, Joerg Ott (Helsinki University of Technology, Finland)

Lunch

Cafeteria

12:00pm - 1:30pm Lunch at the conference venue

Session 2 – WSNs in Pervasive Systems

Auditorium

1:30pm - 3:30pm Chair: **Yonghe Liu** (The University of Texas at Arlington, USA)

- 2A1. **Engineering Energy-Efficient Target Detection Applications in Wireless Sensor Networks**
Paolo Medagliani, Gianluigi Ferrari (University of Parma, Italy), Jeremie Leguay, Vincent Gay, Mario Lopez-Ramos (Thales Communications, France),
- 2A2. **Blurring Snapshots: Temporal Inference of Missing and Uncertain Data**
Vasanth Rajamani, Christine Julien (The University of Texas at Austin, USA)
- 2A3. **Adaptive Deployment for Pervasive Data Gathering in Connectivity-Challenged Environments**
Tahiry Razafindralambo, Nathalie Mitton (INRIA Lille-Nord Europe, France), Aline Carneiro Viana (INRIA, France), Marcelo Dias de Amorim (UPMC Paris Universitatis, France), Katia Obraczka (University of California, Santa Cruz, USA)
- 2A4. **Sell Your Experiences: A Market Mechanism based Incentive for Participatory Sensing**
Juong-Sik Lee, Baik Hoh (Nokia Research Center, USA)

Coffee/Tea break

Foyer

3:30pm - 4:00pm Coffee/Tea break

Demo and Work-in-Progress "Teaser Madness"

Auditorium

4:00pm - 4:30pm Demo/WiP teasers Moderators:
Qi Han (Colorado School of Mines, USA)
Pedro Jose Marron (University of Duisburg-Essen and Fraunhofer IAIS, Germany)
Akilles Kameas (University of Patras, Greece)
Joerg Ott (Aalto University, Finland)

Demo Session (parallel)

Room O138

4:30pm - 6:30pm Chairs: **Qi Han** (Colorado School of Mines, USA)
Pedro Jose Marron (University of Duisburg-Essen and Fraunhofer IAIS, Germany)

- D1. **A Visual, Open-Ended Approach to Prototyping Ubiquitous Computing Applications**
Zoé Drey, Charles Consel (INRIA/Thales/LaBRI/ENSEIRB, Talence, France)
- D2. **A Tool Suite to Prototype Pervasive Computing Applications**
Damien Cassou, Julien Bruneau, Charles Consel (INRIA/Thales/LaBRI/ENSEIRB, Talence, France)
- D3. **ALYZE - An Analysis Tool for Wireless Sensor Networks with a Direct Physical Interaction Interface**
Claas Busemann, Stefan Behrensen, Daniela Nicklas (OFFIS - Institute for Information Technology, Oldenburg, Germany and Carl von Ossietzky Universitaet, Oldenburg, Germany)

- D4. **Cloud-Assisted Mobile Desktop Search**
Eemil Lagerspetz, Sasu Tarkoma (Helsinki Institute for Information Technology, University of Helsinki, Finland)
- D5. **Efficient Tracking of Moving Objects using Generic Remote Trajectory Simplification**
Ralph Lange, Frank Dürr, Kurt Rothermel (Institute of Parallel and Distributed Systems, Universität Stuttgart, Germany)
- D6. **A Multi-Screen Cyber-Physical Game Engine with Body-Area IMU Sensor Networks**
Chin-Hao Wu, Yuan-Tse Chang, and Yu-Chee Tseng (National Chiao Tung University)
- D7. **REWARD: A Real World Achievement and Record Database**
Tonio Triebel, Benjamin Guthier, Sascha Schnauffer, Hendrik Lemelson, Gregor Schiele, Wolfgang Effelsberg (University of Mannheim, Germany)
- D8. **Authorized Access on and Interaction With Digital Product Memories**
Boris Brandherm, Jens Hauptert, Alexander Kröner, Michael Schmitz, Frank Lehmann (German Research Center for Artificial Intelligence and kohlpharma GmbH, Germany)
- D9. **NexusVIS: A Distributed Visualization Toolkit for Mobile Applications**
Carlos Lübbe, Andreas Brodt, Nazario Cipriani, Harald Sanftmann (Universität Stuttgart, Germany)
- D10. **Open Radio Map Based Indoor Navigation Service System**
Dongsoo Han, Minkyu Lee (Korea Advanced Institute of Science and Technology, Korea)

Work-in-Progress Session (parallel)

Hallway and Foyer

4:30pm - 6:30pm Chair: **Achilles Kameas** (University of Patras, Greece)
Joerg Ott (Aalto University, Finland)

- W1. **The Design of QoS Provisioning Mechanisms for Wireless Network**
Ho-Ting Wu, Min-Hua Yang and Kai-Wei Ke (Dept. of Computer Science and Information Engineering, National Taipei University of Technology)
- W2. **Message Deletion and Mobility Patterns for Efficient Message Delivery in DTNs**
Sathita Kaveevivitcha, Hideya Ochiai and Hiroshi Esaki (The University of Tokyo)
- W3. **Crowd-sourcing world models with OpenRoomMap**
Andrew Colin Rice and Oliver J Woodman (Computer Laboratory, University of Cambridge)
- W4. **Roles and Rights Management Concept With Identification by Electronic Identity Card**
Boris Brandherm, Jens Hauptert, Alexander Kröner, Michael Schmitz (German Research Center for Artificial Intelligence) and Frank Lehmann (kohlpharma GmbH)
- W5. **Player Tracker - A Tool to Analyze Sport Players using RFID**
Aislan G. Foina, Rosa M. Badia (Barcelona Supercomputing Center and Artificial Intelligence Research Institute, Spanish National Research Council), Ahmed El-Deeb (Department of Computer Science & Engineering, The American University in Cairo) and Francisco Javier Ramirez-Fernandez (Laboratory of Microelectronic, Universidade de São Paulo)

- W6. **Context-Aware Labels: Generation and Verification**
Seng W Loke (Department of Computer Science and Computer Engineering, La Trobe University)
- W7. **Distributed Winner Determination Protocol for Reverse Auction-based Task Allocation in Pervasive Computing**
Neda Edalat (National University of Singapore), Wendong Xiao, Chen Khong Tham (Institute for Infocomm Research) and Ehsan Keikha (National University of Singapore)
- W8. **Message Encoding of SOAP Web Services**
Guido Moritz, Dirk Timmermann (Institute of Applied Microelectronics and CE, University of Rostock), Regina Stoll (Institute of Preventive Medicine, University of Rostock) and Frank Golatowski (Center for Life Science and Automation)
- W9. **Exploring Ambient Visualizations of Context Information**
Florian Alt, Alireza Sahami Shirazi, Andreas Kaiser, Ken Pfeuffer, Emre Guerkan, Albrecht Schmidt (University of Duisburg-Essen), Paul Holleis and Matthias Wagner (DOCOMO Euro Labs)
- W10. **Body Sensor Networks for Baseball Swing Training: Coordination Analysis of Human Movements Using Motion Transcripts**
Hassan Ghasemzadeh and Roozbeh Jafari (Embedded Systems and Signal Processing Lab, Department of Electrical Engineering, University of Texas at Dallas)
- W11. **Flow-Driven Ambient Guidance**
Gerd Kortuem, Fahim Kawsar and Bashar Altakrouri (Computing Department, Lancaster University)
- W12. **A Pervasive Activity Management and Rehabilitation Support System for the Elderly**
Giovanni Pioggia, Gennaro Tartarisco (Institute of Clinical Physiology), Gaetano Valenza (University of Pisa), Silvio Bonfiglio (FIMI s.r.l.), Giulia Ricci and Gabriele Siciliano (University of Pisa)
- W13. **GeoKad: A P2P Distributed Localization Protocol**
Marco Picone, Michele Amoretti and Francesco Zanichelli (Department of Information Engineering, University of Parma)
- W14. **Floating Content: Information Availability in Urban Environments**
Jussi Kangasharju (University of Helsinki), Jörg Ott (Aalto University) and Ossi Karkulahti (University of Helsinki)
- W15. **A Pharmaceutical Intelligent Information System to Detect Allergies and Adverse Drugs Reactions based on Internet of Things**
Antonio Jara, Francisco Belchi, Alberto Alcolea, Jose Santa, Miguel A. Zamora-Izquierdo and Antonio F. Gómez-Skarmeta (Department Information and Communications Engineering, University of Murcia)

Reception (parallel to Demo/WiP) (parallel)

Foyer

4:30pm - 6:30pm

Reception with drinks and hors d'oeuvre

Wednesday, March 31st, PerCom Day-2

Message from IEEE Computer Society

Auditorium

8:30am - 8:45am **Message from Jim Isaac** (IEEE Computer Society President)

Keynote Lecture

Auditorium

8:45am - 10:00am **Ten Views to Context Awareness**
Pertti Huuskonen (Nokia Research Center, Finland)

Coffee/Tea break

Foyer

10:00am - 10:30am Coffee/Tea break

Session 3 - Best Papers

Auditorium

10:30am - 12:00pm Chair: **Steve Ward** (MIT, USA)

- 3A1. **Decomposing Power Measurements for Mobile Devices**
Andrew Colin Rice, Simon Hay (University of Cambridge, UK)
- 3A2. **An Integrated Network of Roadside Sensors and Vehicles for Driving Safety: Concept, Design and Experiments**
Hua Qin, Zi Li, Yanfei Wang, Xuejia Lu, Wensheng Zhang (Iowa State University, USA), Guiling Wang (New Jersey Institute of Technology, US)
- 3A3. **Negotiate Power and Performance in the Reality of RFID Systems**
Xunteng XU, Jianping Wang (City University of Hong Kong, HK), Lin Gu (Hong Kong University of Science and Technology, HK), Guoliang Xing (Michigan State University, USA)

Lunch

Cafeteria

12:00pm - 1:30pm Lunch at the conference venue

Session 4A – Human Activity Recognition (parallel)

Room O169

1:30pm - 3:00pm Chair: **Paul Lukowicz** (University of Passau, Germany)

- 4A1. **An Event-based Approach to Multi-modal Activity Modeling and Recognition**
Marten Pijl, Steven van de Par, Caifeng Shan (Philips Research, The Netherlands)

- 4A2. **Capture, Recognition, and Visualization of Human Semantic Interactions in Meetings**
Zhiwen Yu, Zhiyong Yu (Northwestern Polytechnical University, China), Hideki Aoyama, Motoyuki Ozeki, Yuichi Nakamura (Kyoto University, Japan)
- 4A3. **AutoGait: A Mobile Platform that Accurately Estimates the Distance Walked**
Dae-Ki Cho, Min Mun, Williams J. Kaiser, Mario Gerla (University of California at Los Angeles, USA), Uichin Lee (Bell Labs, Alcatel-Lucent, USA)

Session 4B – Middleware for Pervasive Applications (parallel) Room O163

1:30pm - 2:50pm Chair: **Jadwiga Indulska** (The University of Queensland, Australia)

- 4B1. **MediAlly: A Provenance-Aware Remote Health Monitoring Middleware**
Atanu Roy Chowdhury (Harvard University, USA), Ben Falchuk, Archan Misra (Telcordia Technologies, USA)
- 4B2. **Orchestrator: A Holistic and Adaptive Resource Orchestration Framework for Mobile Context Monitoring in Sensor-rich Mobile Environments**
Seungwoo Kang, Chulhong Min, Younghyun Ju, Youngki Lee, Taiwoo Park, Jinwon Lee, Junehwa Song (KAIST, Korea), Yunseok Rhee (HUMS, Korea)
- 4B3. **Taming Software Adaptability with Architecture-Centric Framework** (concise contribution)
Bo Ding, Huai-min Wang, Dian-xi Shi (National University of Defense Technology, China), Jiannong Cao (Hong Kong Polytechnic University, HK)

Coffee/Tea break

Foyer

3:00pm - 3:30pm Coffee/Tea break

PhD Forum "Teaser Madness"

Auditorium

3:30pm - 3:50pm Moderator: **Claudio Bettini** (University of Milan, Italy)

PhD Forum Posters

Room O138

3:50pm - 5:30pm Chair: **Claudio Bettini** (University of Milan, Italy)

- P1. **Impenetrable Obscurity vs. Informed Decisions: Privacy Solutions for Participatory Sensing**
Delphine Christin (Technische Universität Darmstadt, Germany)
- P2. **Towards a Proactive System Based on Activity Recognition**
Rim Helaoui (University of Mannheim, Germany)
- P3. **Towards Robust and Efficient Visibility-aware Sensor-based Mobile Spatial Interaction**
Farid Zaid (Technische Universität Darmstadt, Germany)

- P4. **Context-Based Coordination for Pervasive Computing Applications**
Verena Tuttlies (Universität Mannheim, Germany)
- P5. **Extending Pervasive Computing to make Online Presentations More Inclusive**
Raja Kushalnagar (University of Houston, USA)
- P6. **SPARK: A Service Personalisation Architecture**
Gilbert Cassar, (University of Surrey, UK)
- P7. **Bridging the Gap between Users and Smart Products**
Marcus Stander (Technische Universität Darmstadt, Germany)
- P8. **Reliable Event Configuration in Heterogeneous Wireless Sensor Networks**
Steffen Ortmann (IHP Microelectronics, Germany)
- P9. **Towards Opportunistic Applications in a Web of Things**
Dominique Guinard (ETH Zurich / SAP Research, Switzerland)
- P10. **On the Resolution of Conflicts for Collective Pervasive Context-Aware Applications**
Thais Silva (Federal University of Minas Gerais, Brazil)
- P11. **Evaluation of First Order Bayesian Networks for Context Modeling & Reasoning**
Bridget Beamon (The University of Texas at Arlington, USA)
- P12. **Towards implementation of an RFID based Web Service**
Arunabh Chattopadhyay (University of California, Los Angeles, USA)
- P13. **Reliable Framework for Unreliable RFID Devices**
Nova Ahmed (Georgia Institute of Technology, USA)

6:30pm - 10:00pm Conference Banquet and Presentation of Conference Awards.

Mannheim Palace:



The banquet will take place in Mannheim palace, in the historically restored state room area. Mannheim Palace was built beginning in 1720 under Elector Carl Philipp as one of the largest absolutist Baroque palaces on the Upper Rhine. Construction was conducted on the enormous building complex for a total of nearly forty years with the support of important artists such as Balthasar Neumann, Nicolas de Pigage and Cosmas Damian Asam.

The Gartensaal:



In the state room area, several hundred original objects, including furniture, paintings, tapestries, china and clocks, reflect the courtly atmosphere of days gone by. We will use a state room on the ground floor for the banquet, the so-called *Gartensaal*.

Thursday, April 1st, PerCom Day-3

Panel Session

Auditorium

8:30am - 10:00am

Panel: "Pervasive Computing: What Next?"

Moderator: **Djamshid Tavangarian** (University of Rostock, Germany)

Panelists: **Alois Ferscha** (Johannes Kepler Universität Linz, Austria)

Liviu Iftode (Rutgers University, USA)

Jie Liu (Microsoft Research, USA)

Archan Misra (Telcordia Technologies, USA)

Coffee/Tea break

Foyer

10:00am - 10:30am

Coffee/Tea break

Session 5 – Position and Route Estimation

Auditorium

10:30am - 12:00pm

Chair: **Albrecht Schmidt** (University of Duisburg-Essen, Germany)

5A1. **Tuning to Your Position: FM radio based Indoor Localization with Spontaneous Recalibration**

Aleksandar Matic, Andrei Papliatseyeu, Venet Osmani, Oscar Mayora (CreateNet, Italy)

5A2. **Dead Reckoning from the Pocket - An Experimental Study**

Ulrich Steinhoff, Bernt Schiele (TU Darmstadt, Germany)

5A3. **Where You Go and How You Go: Mining to Predict Destination and Future Route**

Lv Mingqi, Ling Chen, Gencai Chen (Zhejiang University, China)

Lunch

Cafeteria

12:00pm - 1:30pm

Lunch at the conference venue

Session 6A – Pervasive Systems (parallel)

Room O169

1:30pm - 3:00pm

Chair: **Andrea Passarella** (IIT-CNR, Italy)

6A1. **Collaborative Real-Time Speaker Identification for Wearable Systems**

Mirco Rossi, Martin Kusserow (ETH Zurich, Switzerland), Oliver Amft (TU Eindhoven, The Netherlands), Gerhard Tröster (Wearable Computing Lab ETH Zürich, Switzerland)

6A2. **Ad-hoc Voice-based Group Communication**

Lu Han, Stephen Smaldone, Pravin Shankar, James Boyce, Liviu Iftode (Rutgers University, USA)

6A3. **Product-Mediated Communication through Digital Object Memories in Heterogeneous Value Chains**

Peter Stephan, Gerrit Meixner, Holger Kessling (German Research Center for Artificial Intelligence, Germany), Florian Floerchinger, Lisa Ollinger (Technical University of Kaiserslautern, Germany)

Session 6B – Pervasive Applications Development (parallel) Room 0163

1:30pm - 2:50pm Chair: **Archan Misra** (Telcordia Technologies, USA)

6B1. **PerViz: Painkillers for Pervasive Application Debugging**

Hubert Pham, Justin Mazzola Paluska (MIT, USA)

6B2. **Scavenger – Transparent Development of Efficient Cyber Foraging Applications**

Mads D Kristensen (Aarhus University, Denmark)

6B3. **Pervasive Maps: Explore and Interact with Pervasive Environments** (concise contribution)

Geert Vanderhulst, Kris Luyten, Karin Coninx (Hasselt University, Belgium)

Coffee/Tea break

Foyer

3:00pm - 3:30pm Coffee/Tea break

Session 7 – Localization and Tracking

Auditorium

3:30pm - 5:00pm Chair: **Jiannong Cao** (Hong Kong Polytechnic University, HK)

7A1. **A Comparative Study of DECT and WLAN Signals for Indoor Localization**

Matthias Kranz (Technische Universität München, Germany), Carl Fischer (Lancaster University, UK), Albrecht Schmidt (University of Duisburg-Essen, Germany)

7A2. **Indoor Localization in Multi-Floor Environments with Reduced Effort**

Hua-Yan Wang (Stanford University, USA), Vincent Wenchen Zheng, Qiang Yang (Hong Kong University of Science and Technology, HK), Junhui Zhao (NEC Labs, China, China)

7A3. **Zero-knowledge Real-time Indoor Tracking via Outdoor Wireless Directional Antennas**

Thadpong Pongthawornkamol, Shameem Ahmed, Klara Nahrstedt (University of Illinois at Urbana-Champaign, USA), Akira Uchiyama (Osaka University, Japan)

PerCom "Town Hall" Meeting

Auditorium

5:00pm - 6:00pm Chair: **Mohan Kumar** (PerCom Steering Committee Chair)

All attendees are welcome! The IEEE PerCom Steering Committee Chair will lead a discussion on current and future directions of the conference. Attendees are asked to provide suggestions and feedback.

Friday, April 2nd, Post-conference Workshops

- **Morning coffee break:** 10:00am – 10:30am
- **Afternoon coffee break:** 3:00pm – 3:30pm
- **Lunch break:** 12:00am – 1:30pm

MP2P 2010

The Sixth International Workshop on Mobile Peer-to-Peer Computing

PerCol 2010

First International Workshop on Communication, Collaboration and Social Networking in Pervasive Computing Enviroments

PerNEM 2010

First Annual Workshop on Pervasive Networks for Emergency Management

PerEL 2010

The 6th International Workshop on Pervasive Learning

PerWare 2010

7th IEEE Middleware Support for Pervasive Computing Workshop

PWN 2010

6th IEEE PerCom Workshop on Pervasive Wireless Networking

MP2P 2010: The Sixth International Workshop on Mobile Peer-to-Peer Computing

Location: **Room O129**

Session 1 - Mobile P2P Data and Network Services (I)

8:30am - 10:00am

- MP1. **Collaborative Optimistic Replication for Efficient Delay-Sensitive MP2P Streaming Using Community Oriented Neighboring Feedback**, Constandinos Mavromoustakis (University of Nicosia)
- MP2. **Privacy-Preserving Admission to Mobile Peer-to-Peer Groups**
Mark Manulis (TU Darmstadt)
- MP3. **On the Capacity of Tree-Based P2P Streaming Systems**
Pin-Chuan Liu (National Tsing Hua University), Chih-Wei Yi, Yi-Ta Chuang, Hsiao-Heng Lu (National Chiao Tung University), and Wei-Kuan Shih (National Tsing Hua University)

Session 2 - Mobile P2P Data and Network Services (II)

10:30am - 12:00pm

- MP4. **Using Wi-Fi to Save Energy via P2P Remote Execution**
Mads Kristensen, and Niels Olof Bouvin (Aarhus University)
- MP5. **Hierarchical Role-based Data Dissemination for Large-Scale Wireless Sensor Networks with Mobile Sinks**
Guo-He Ye, Lo-Yao Yeh, and Jiun-Long Huang (National Chiao Tung University)
- MP6. **PASMi: Self-adaptive Photo Annotation and Sharing Middleware**
Addisalem Negash Shiferaw, Sonia Lajmi, Vasile-Marian Scuturici, and Lionel Brunie (University of Lyon)

Session 3 - Mobile and Opportunistic Network Services

1:30pm - 3:00pm

- MP7. **Message Propagation in Ad-Hoc-Based Proximity Mobile Social Networks**
Wenbo He (University of Nebraska-Lincoln), Ying Huang, Klara Nahrstedt (University of Illinois at Urbana Champaign), and Bo Wu (Universtiy of New Mexico)
- MP8. **Bootstrapping Security Associations in Opportunistic Networks**
Abdullatif Shikfa, Melek Onen, and Refik Molva (EURECOM)
- MP9. **Self-Evolving Applications over Opportunistic Communication Systems**
Iacopo Carreras (CREATE-NET Research Center), and David Linner (TU Berlin)

PerCol 2010: First International Workshop on Communication, Collaboration and Social Networking in Pervasive Computing Environments

Location: **Room O131**

Session 1 - Pervasive Social Networking

8:30am - 10:00pm

- PC1. **SCOPE: A Prototype for Spontaneous P2P Social Networking**
Mehdi Mani, Anh-Minh Nguyen and Noel Crespi (Telecom SudParis)
- PC2. **The Live Social Semantics application: a platform for integrating face-to-face presence with on-line social networking**
Wouter Van den Broeck, Ciro Cattuto (Institute for Scientific Interchange (ISI) Foundation), Alain Barrat (CNRS), Martin Szomsor, Gianluca Correndo (University of Southampton) and Harith Alani (Open University)

Session 2 - Pervasive Collaboration

10:30am - 12:00pm

- PC3. **Service-based Development of Mobile Real-time Collaboration Applications for Social Networks**
Daniel Schuster, Thomas Springer and Alexander Schill (TU Dresden)
- PC4. **Optimizing Meeting Scheduling in Collaborative Mobile Systems through Distributed Voting**
Ville Antila, Jani Mäntyjärvi and Ville Könönen (VTT)

Session 3 - User Groups and Adaptation

1:30pm - 3:00pm

- PC5. **A Reinforcement Learning based Self-healing Algorithm for Managing Context Adaptation**
Cioara Tudor, Ionut Anghel, Ioan Salomie, Mihaela Dinsoreanu, Georgiana Copil and Daniel Moldovan (Technical University of Cluj-Napoca)
- PC6. **Urbiflock: An experiment in Dynamic Group Management in Pervasive Social Applications**
Andoni Lombide Carreton, Dries Harnie, Elisa Gonzalez Boix, Christophe Scholliers, Tom Van Cutsem, and Wolfgang De Meuter (Vrije Universiteit Brussel)

Session 4 - Short Paper and Panel Discussion

3:30pm - 5:00pm

- PCS. **Supporting Dynamic Mobile Applications through Distribution of Components**
Juliana Aquino, Markus Endler, José Viterbo F. (PUC Rio)
- PCD. **Pervasive Collaboration and Social Networking - what does it mean?**
Thomas Springer (TU Dresden) and Markus Endler (PUC Rio)
- PCC. **Summarizing the workshop - what will be challenging future research directions for PerCol**
Thomas Springer (TU Dresden) and Markus Endler (PUC Rio)

PerNEM 2010: First Annual Workshop on Pervasive Networks for Emergency Management

Location: **Room O145**

Session 1 - Wireless Protocols for Emergency Management

9:00am - 10:00pm

- PN1. **An Adaptive Multiple Rendezvous Control Channel for Cognitive Radio Wireless Ad Hoc Networks**
Claudia Cormio (Politecnico di Bari), Kaushik Chowdhury (Georgia Tech)
- PN2. **Topology reconfiguration in IEEE 802.15.4 WPANs for emergency management**
Emanuele Cipollone, Francesca Cuomo, Anna Abbagnale (University of Rome "Sapienza")

Session 2 - Adaptive Routing for Emergency Situations

10:30am - 12:00pm

- PN3. **A Real-Time and Robust Routing Protocol for Building Fire Emergency Applications Using Wireless Sensor Networks**
Yuanyuan Zeng (Wuhan University)
- PN4. **HERO: Hybrid Emergency Route-Opening Protocol**
Jonathan Woodbridge, Mars Lan, Giovanni Pau, Majid Sarrafzadeh, Mario Gerla (UCLA)
- PNT. **A tutorial on emergency simulation and decision support algorithms for disaster management in buildings**
Avgoustinos Filippoupolitis (Imperial College London)

Session 3 - Emergency Communication Systems

1:30pm - 3:00pm

- PN5. **Fast Message Dissemination for Emergency Communications**
Ricardo Lent, Omer H. Abdelrahman, Gokce Gorbil, Erol Gelenbe (Imperial College London)
- PN6. **Pervasive Emergency Response Process Management System**
Jörn Franke (SAP Research Sophia Antipolis), François Charoy (University Henri Poincaré Nancy 1 – LORIA), Cedric Ulmer (SAP Research Sophia Antipolis)

PN7. **The ADAMO Project: Architecture to Support Communication for Emergency Services**

Johan Bergs, Dries Naudts, Nik Van den Wijngaer, Chris Blondia, Ingrid Moerman, Piet Demeester (IBBT), Jerome Paquay, Frank De Reymaeker, John Baekelmans (Cisco Systems)

Session 4 - Architectures and Systems for Emergency Management Applications

3:30pm - 4:30pm

PN8. **Practical Experiences in Enabling and Ensuring Quality Sensing In Emergency Response Applications**

Nalini Venkatasubramanian (University of California Irvine), Qi Han (Colorado School of Mines), Reza Rahimi (University of California Irvine)

PN9. **Emergency Management for Information Systems in Public Health -A Case Study of the 2009 Pandemic-Flu Response in Japan**

Tomoki Murota (University of Tokyo), Akira Kato (Keio University), Takashi Okumura (National Institute of Public Health)

PerEL 2010: The 6th International Workshop on Pervasive Learning

Location: **Room O133**

Session 1

8:30am - 10:00am

- PL1. **A Management Model of Learning Objects in a Ubiquitous Learning Environment**
Jorge Barbosa, Marcus Lewis, Cassia Nino, João Henrique Rosa (University of Vale do Rio dos Sinos), Débora Barbosa (Centro Universitário LaSalle)
- PL2. **Improving browsing usability for mobile learners**
Dimitrios Glaroudis, Isabella Kotini, Athanasios Manitsaris (University of Macedonia)
- PL3. **A Context and Service-oriented Approach Towards Mobile Learning Management Systems**
Raphael Zender, Philipp Lehsten, Ulrike Lucke, Djamshid Tavangarian (University of Rostock)

Session 2

10:30am - 12:00pm

- PL4. **Stimulating cooperative and participative learning to match digital natives' needs**
Alessandra Agostini, Elisa Di Biase (University of Milano-Bicocca), Marco Loregian (ITSME)
- PL5. **Let the Play Set Come Alive: Supporting Playful Learning through the Digital Augmentation of a Traditional Toy Environment**
Steve Hinske, Matthias Lampe (ETH Zurich), Nicola Yuill (University of Sussex), Sara Price (University of London), Marc Langheinrich (University of Lugano)
- PLD. **Discussion on current trends and future directions of the field**

PerWare 2010: 7th IEEE Middleware Support for Pervasive Computing Workshop

Location: **Room O142**

Session 1 – Placement and Composition

8:45am - 10:00am

- PE1. **Middleware for Decentralised Fault Tolerant Service Execution using Replication in Pervasive Systems**
Sagar A. Tamhane, Mohan Kumar (University of Texas at Arlington)
- PE2. **CBay: Extending auction algorithm for component placement in the Internet of machines**
Charbel El Kaed, Francois Gael Ottogalli (France Telecom), Yves Denneulin (University of Grenoble)
- PE3. **ReSCo: A Middleware Component for Reliable Service Composition in Pervasive Systems**
Brent Lagesse (Oak Ridge National Laboratory), Mohan Kumar, Matthew Wright (University of Texas at Arlington)

Session 2 – Context Management

10:30am - 12:00pm

- PE4. **Context-aware and resource efficient sensing infrastructure for context-aware applications**
Peizhao Hu, Jadwiga Indulska (The University of Queensland), Suan Khai Chong, Shonali Krishnaswamy (Monash University)
- PE5. **The Architecture Design of a Cross-Domain Context Management System**
Bin Guo, Lin Sun, Daqing Zhang (Institut Telecom SudParis)
- PE6. **A Secure Context Distribution Framework for Peer-based Pervasive Systems**
Wolfgang Apolinarski, Marcus Handte, Pedro Jose Marron (University of Duisburg-Essen and Fraunhofer IAIS)

Session 3 – Programming Models

1:30pm - 3:00pm

- PE7. **Upperware: Bringing Resources Back to the System**
Francisco J. Ballesteros, Gorka Guardiola, Enrique Soriano (Universidad Rey Juan Carlos)
- PE8. **Chit-based Remote Storage**
Justin Mazzola Paluska, Steve Ward (MIT)

Session 4 – Open Panel Discussion

3:30pm - 5:00pm

PWN 2010: 6th IEEE PerCom Workshop on Pervasive Wireless Networking

Location: **Room O148**

Opening Remarks

8:20am - 8:30am

Session 1 – Mobility, Topology and Power Control

8:30am - 10:00pm

- PW1. **On Topology Control and Non-Uniform Node Deployment in Arbitrary Ad Hoc Networks**
Vasileios A Karyotis, Alexandros Konstantinos Manolakos, Symeon Papavassiliou (National Technical University of Athens, Greece)
- PW2. **Gradational Power Control in Multi-channel Multi-radio Wireless Ad Hoc Networks**
Tzu-Ting Weng (National Chiao-Tung University, Taiwan), Ting-Yu Lin (University of Illinois at Urbana-Champaign), Kun-Ru Wu (National Chiao-Tung University, Taiwan)
- PW3. **Vertical Handover based on the Prediction of Mobility of Mobile Node**
Bo Yle Jung, Kyung Tae Kim, and Hee Yong Youn (Sungkyunkwan University, Korea)

Session 2 – Localization and Location-based Protocols

10:30am - 12:00pm

- PW4. **Automatic Identification of Fingerprint Regions for Quick and Reliable Location Estimation**
Hendrik Lemelson, Sascha Schnauffer and Wolfgang Effelsberg (University of Mannheim, Germany)
- PW5. **GuardianAngel: An RFID-based Indoor Guidance and Monitoring**
Nova Ahmed (Georgia Institute of Technology)
- PW6. **Geocast Routing of Symbolically Addressed Messages in Wireless Mesh Networks**
Frank Durr, Harald Weinschrott, Kurt Rothermel (Universität Stuttgart, Germany)

Session 3 – Multimedia Support for Wireless Networks

1:30pm - 3:00pm

- PW7. **An Efficient AP Channel Scanning Scheme for Real-time Streaming over WLAN**
Hyun Chul Lee, Kyung Tae Kim and Hee Yong Youn (Sungkyunkwan University, Korea)

- PW8. **Gateway Designation for Timely Communications in Instant Mesh Networks**
Bo Xing, Mayur Deshpande, Sharad Mehrotra, Nalini Venkatasubramanian (University of California, Irvine)
- PW9. **User-Perceived QoS Performance Enhancement for VoIP Services in IEEE 802.16 Systems**
Sung-Min Oh and Jae-Hyun Kim (Ajou University, Korea)

Session 4 - Distributed Algorithms and Principles

3:30pm - 5:00pm

- PW10. **An Integrated System for Secure Code Distribution in Wireless Sensor Networks**
Nicola Bui (Consorzio Ferrara Ricerche, Italy), Moreno Dissegna, Michele Rossi, Michele Zorzi (University of Padova, Italy), Osman Ugus (NEC Europe Ltd. , Germany)
- PW11. **Towards Automated Verification of Autonomous Networks: A Case Study in Self-Configuration**
Jaeseung Song, Tiejun Ma and Peter Pietzuch (Imperial College London, UK)
- PW12. **Collaborative Municipal Wi-Fi Networks - Challenges and Opportunities**
Tobias Heer, René Hummen, Nicolai Viol, Hanno Wirtz, Stefan Götz und Klaus Wehrle (RWTH Aachen University, Germany)