

PerCom2012 – Technical Program

Palazzo dei Congressi
Piazza Indipendenza 4
Lugano
Switzerland



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NOKIA

19-23 March 2012

Monday, 19 March, 2012

WORKSHOPS

IBM Ph.D. Forum 2012 – Room B1

PerHot: The 1st International IEEE Workshop on Hot Topics in Pervasive Computing and Communication – **Room B3**

PerSeNS: Workshop on Sensor Networks and Systems for Pervasive Computing – **Room E**

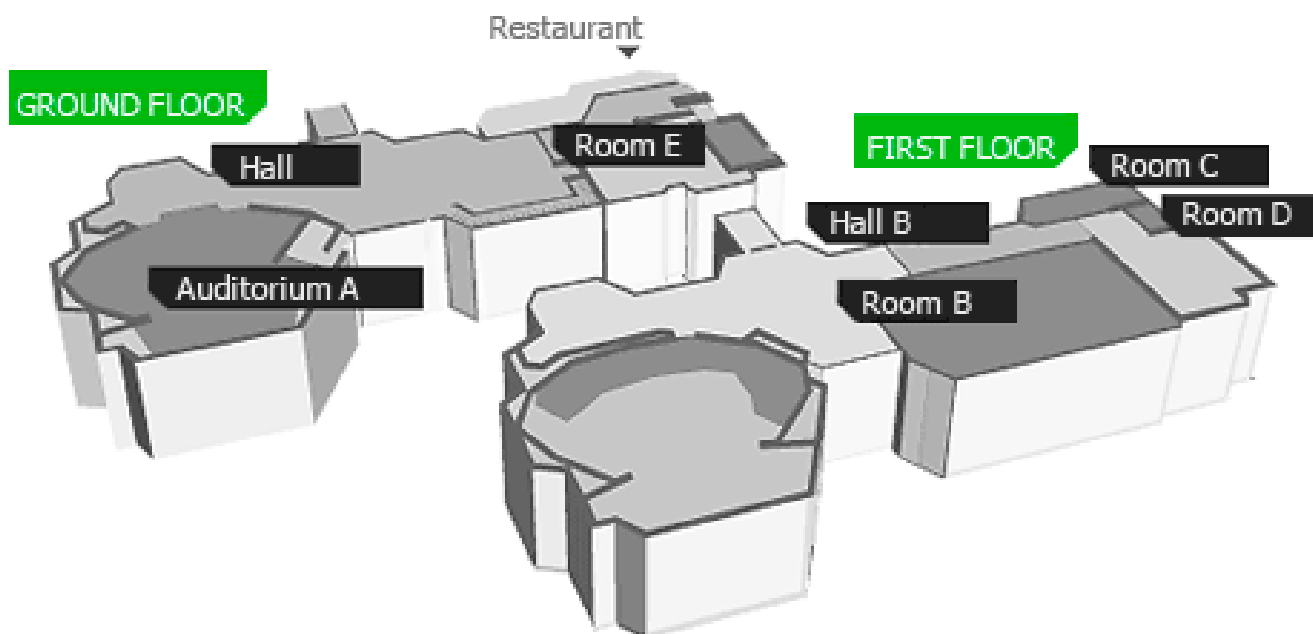
SESOC: Workshop on Security and Social Networking – **Room C1**

PerCol: Workshop on Pervasive Collaboration and Social Networking – **Room C2**

MUCS: Workshop on Managing Ubiquitous Communications and Services – **Room C3**

IQ2S: Workshop on Information Quality and Quality of Service for Pervasive Computing – **Room D**

PerMoby: Workshop on Impact of Human Mobility in Pervasive Systems and Applications – **Room B2**



Registration: 8:00-17:00 – Hall
Coffee Break: 10:00-10:30 – Hall
Lunch: 12:00-13:30 – Hall
Coffee Break: 15:00-15:30 - Hall

Tuesday, 20 March, 2012

8:00-17:30 Registration – Room D

8:30-8:45 Welcome – Room A (Theater)

8:45-10:00 Keynote – Room A (Theater)

Keynote Speaker: **Professor Andy Hopper** - University of Cambridge
"Computing for the Future of the Planet".

10:00-10:30 Coffee Break – Room B

10:30 – 12:00 Session 1: Tracking with Phones – Room A (Theater)

Session chair: Sajal Das, University of Texas at Arlington, USA

FTrack: Infrastructure-free Floor Localization via Mobile Phone Sensing

Haibo Ye (Nanjing University, P.R. China); Tao Gu (University of Southern Denmark, Denmark); Xiaorui Zhu (Nanjing University, P.R. China); Jingwei Xu (Nanjing, P.R. China); Xianping Tao (Nanjing University, P.R. China); Jian Lu (Nanjing University, P.R. China); Ning Jin (University of Southern Denmark, Denmark)

Smartphone-based Wi-Fi Pedestrian-Tracking System Tolerating the RSS Variance Problem

Yungeun Kim (Yonsei University, Korea); Hyojeong Shin (Yonsei University, Korea); Hojung Cha (Yonsei University, S. Korea, Korea)

Crowds replace Experts: Building Better Location-based Services using Mobile Social Network Interactions

Pravin Shankar (Rutgers University, USA); Woody Huang (Research Staff Member, USA); Paul Castro (IBM T.J. Watson Research Center, USA); Badri Nath (Rutgers University, USA); Liviu Iftode (Rutgers University, USA)

12:00-13:30 Lunch – Room B

13:30-15:30 Session 2 – Context and Data-driven applications – Room A (Theater)

Session chair: Behrooz Shirazi, Washington State University, USA

Formal Specification and Runtime Detection of Temporal Properties for Asynchronous Context

Hengfeng Wei (Nanjing University, P.R. China); Yu Huang (Nanjing University, P.R. China); Jiannong Cao (Hong Kong Polytechnic Univ, Hong Kong); Xiaoxing Ma (Nanjing University, P.R. China); Jian Lu (Nanjing University, P.R. China)

Your Mobility can be Injurious to Your Health: Analyzing Pervasive Health Monitoring Systems under Dynamic Context Changes

Ayan Banerjee (Arizona State University, USA); Sandeep Gupta (Arizona State University, USA)

Bridging Vision and Commonsense for Multimodal Situation Recognition in Pervasive Systems

Nicola Biccocchi (University of Modena and Reggio Emilia, Italy); Matteo Lasagni (University of Lubeck, Germany); Franco Zambonelli (University of Modena and Reggio Emilia, Italy)

Ad-hoc Symbiotic Interactive Displays through DLNA

Jannick Bitsch (Aarhus University, Denmark); Niels Olof Bouvin (Aarhus University, Denmark)

15:30-16:00 Coffee Break – Room B

16:00-16:30 Demo and WIP Teaser Madness – Room A (Theater)

16:30-18:30 Demo session (parallel) Room B

Chairs: Daniele Puccinelli, Anand Ranganathan, Igor Curcio

The Constrained Application Protocol for Pervasive Machine-To-Machine Communications, Markus Becker, Thomas Poetsch, Koojana Kuladinithi, Carmelita Goerg, University of Bremen, Germany

LEGS: A Load-balancing Emergency Guiding System Based on Wireless Sensor Networks, Lien-Wu Chen, Feng Chia University, Taiwan; Jen-Hsiang Cheng, Yu-Chee Tseng, National Chiao Tung University, Taiwan; Lun-Chia Kuo, Jen-Chieh Chiang, Wan-Jung Lin, Industrial Technology Research Institute, Taiwan

Road Condition Monitoring and Alert Application, Avik Ghose, Provat Biswas, Chirabrata Bhaumik, Monika Sharma, Arpan Pal, Abhinav Jha, Tata Consultancy Services, India

Ubi-Post briefcase: a content-oriented security solution for high value shipping, Jean-François Verdonck, Paul Couderc, Michel Banâtre, INRIA Rennes, France

myGander: A Mobile Interface and Distributed Search Engine for Pervasive Computing, Jonas Michel, Christine Julien, University of Texas at Austin, USA Jamie Payton, University of North Carolina at Charlotte, USA Gruia-Catalin Roman, University of New Mexico, USA

Reliability Enhancement and Performance Visualization System for Wireless Body Area Network, Aung Aung Phyoo Wai, Yu Ge, Terence S.P. See, Wei Ni, Chee Wee Kim, Tat Meng Chiam, Insitute for Infocomm Research, Singapore

Candy Castle- A Prototype for Pervasive Health Games, Christoph Stach, Luiz Fernando Schindwein, University of Stuttgart, Germany

Touch-driven Interaction via an NFC-enabled Smartphone, Longbiao Chen, Gang Pan, Shijian Li, Zhejiang University, China

LugaReco: Mobile Application for Semantic Recommendation of Tourist Points of Interest using Photographs, Jose Quinteiro, Ernestina Martel-Jordán, Pablo Hernández-Morera, Aaron López-Rodríguez, Tomás García-Pérez Universidad de Las Palmas de Gran Canaria, Spain

WristSense: Wrist-worn Sensor Device with Camera for Daily Activity Recognition, Takuya Maekawa, Yasue Kishino, Yuaka Yanagisawa, Yasushi Sakurai, NTT, Japan

ShineUS: Exploring Preferences in Public Discussion, Dan Chalmers, Paul Calcraft, Ciaran Fisher, Luke Whiting, Jon Rimmer, Ian Wakeman, University of Sussex, UK

PeerSense: who is near you?, Aditi Gupta, Purdue, USA Markus J Miettinen, Nokia, Switzerland Marcin Nagy, N. Asokan, Nokia Research Center, Finland Alexandre Wetzler, EPFL, Switzerland

Configuration Folding: An Energy Efficient Technique for Context Recognition, Umer Iqbal, Marcus Handte, Stephan J Wagner, Pedro Jose Marrón, University of Duisburg-Essen, Germany

Open Innovation Portal: a collaborative platform for open city data sharing, Martin Stephenson, Giusy Di Lorenzo, Pol Mac Aonghusa, IBM Research, Ireland

Pervasive Emergency Support Systems for Building Evacuation, Avgoustinos Filippoupolitis, Gokce Gorbil, Erol Gelenbe, Imperial College, UK

Thumb: A Real-Time Resource Information Sharing Application over Mobile Phones, Narisu Tao, Konglin Zhu, Xiaoming Fu, University of Goettingen, Germany

RASID Demo: A Robust WLAN Device-free Passive Motion Detection System, Ahmed E. Kosba, Alexandria University, Egypt, Moustafa Youssef, Egypt-Japan University of Science and Technology (E-JUST)

16:30-18:30 WIP session (parallel) – Room B

Chairs: Franca Delmastro, Qi Han, Luo Xun

Evaluation of Tooth-touch Sound and Expiration Based Mouse Device for Disabled Persons, Koichi Kuzume (Yuge National College of Maritime Technology, Japan)

Smart Classroom: Real- Time Feedback on Lecture Quality, Nenad Gligorc (Faculty of Organizational Sciences, Serbia); Ana Uzelac (Faculty of Transport and Traffic Engineering, Serbia); Srdan Krco (Faculty of Organizational Sciences, Serbia)

A Combined Approach for Feature Driven User Interface Prototyping, Michael Tschernuth (School of Informatics/Communications/Media, Austria); Mario Buchmayr (Research Center Hagenberg, Austria); Michael Lettner (School of Informatics/Communications/Media, Austria)

RoutineMaker: Towards End-User Automation of Daily Routines Using Smartphones, Ville Antila (VTT, Finland);

Jussi Polet (VTT, Finland); Arttu Lämsä (VTT, Finland); Jussi Liikka (VTT, Finland)

Sustainable Architecture and Human Comfort through Adaptive Distributed Systems, Zoltan Nagy (ETH Zurich, Switzerland); Dino Rossi (ETH Zurich, Switzerland); Arno Schlueter (ETH Zurich, Switzerland)

Towards Context Adaptive Privacy Decisions in Ubiquitous Computing, Florian Schaub (Ulm University, Germany); Bastian Könings (Ulm University, Germany); Michael Weber (University of Ulm, Germany); Frank Kargl (University of Twente, The Netherlands)

Public WiFi Hotspots at Your Service, Geert Vanderhulst (Alcatel-Lucent, Belgium); Lieven Trappeniers (Alcatel-Lucent, France)

QoS Characteristics on a Longcut Route with Various Radio Resource Models, Kenji Kanai (University of Waseda, Japan); Yuri Akamatsu (Waseda University, Japan); Jiro Katto (Waseda University, Japan); Tutomu Murase (NEC Corporation, Japan)

Can Smartphones Detect Stress-related Changes in the Behaviour of Individuals?, Gerald Bauer (University of Passau, Germany); Paul Lukowicz (University of Passau, Germany)

Interacting Places - a Framework for Promoting Community Interaction and Place Awareness through Public Displays, Nemanja Memarovic (Univ. of Lugano, Switzerland); Marc Langheinrich (Univ. of Lugano, Switzerland); Florian Alt (Univ. of Stuttgart, Germany)

Using ambient audio in secure mobile phone communication, Ngu Nguyen (National Institute of Informatics, Japan); Stephan Sigg (TU Braunschweig, Germany); An Huynh (National Institute of Informatics, Japan); Yusheng Ji (National Institute of Informatics, Japan)

Middleware for distributed collaborative ad-hoc environments, Oliver Schmid (University of Fribourg, Switzerland); Béat Hirsbrunner (University of Fribourg, Switzerland)

Sensing the Sensor Web, Jie Wan (CLARITY Centre for Sensor Web Technologies, University College Dublin, Ireland)

Subsurface Monitoring using Low Frequency Wireless Signal Networks, Suk-Un Yoon (Lehigh University, USA); Liang Cheng (Lehigh University, USA); Ehsan Ghazanfari (Lehigh University, USA); Zi Wang (Lehigh University, USA); Xiaotong Zhang (Lehigh University, USA); Sibel Pamukcu (Lehigh University, USA); Muhannad Suleiman (Lehigh University, USA)

(CIA)2-ITS: Interconnecting Mobile and Ubiquitous Devices for Intelligent Transportation Systems, Daniel Fernandes Macedo (Federal University of Minas Gerais, Brazil); Sergio de Oliveira (Federal University of Sao Joao Del Rey, Brazil); Fernando Teixeira (Federal University of Sao Joao Del Rey, Brazil); Andre Aquino (Universidade Federal de Alagoas, Brazil); Ricardo Augusto Rabelo (UFOP/DECOM, Brazil)

Enhancing Location Privacy in Mobile IPv6 by using Redundant Home Agents, Hiroyuki Takahashi (Takushoku University, Japan); Takashi Minohara (Takushoku University, Japan)

Unify to Bridge Gaps: Bringing XMPP into the Internet of Things", Michael Kirsche (Brandenburg University of Technology Cottbus, Germany); Ronny Klauk (Brandenburg University of Technology Cottbus, Germany)

WalkieTagging: Efficient Video Annotation Method based on Spoken Words for Smart Devices, YoungTae Seok (Korean Advanced Institute for Science and Technology, Korea); Howon Lee (KAIST Institute, Korea)

Occupancy Detection in Commercial Buildings using Opportunistic Context Sources, Sunil Kumar Ghai (IBM India Research Laboratory, India); Lakshmi V Thanayankizil (Georgia Institute of Technology, USA); Deva Seetharam (IBM Research - India, India); Dipanjan Chakraborty (IBM Research, India)

Sustainable Instrumentation of Everyday Commodities - Concepts and Tools, Boris Brandherm (German Research Center for Artificial Intelligence, Germany); Alexander Kröner (DFKI, Germany); Jens Hauptert (German Research Center for Artificial Intelligence (DFKI), Germany); Michael Schmitz (DFKI, Germany); Ralf Gampfer (ProcMaS Consulting GmbH, Germany); Frank Lehmann (Kohlpharma GmbH, Germany)

Towards an On-Site Characterization of Energy Harvesting Devices for Wireless Sensor Networks, Leander B Hörmann (TU Graz, Austria); Philipp M Glatz (Delft University of Technology, The Netherlands); Karima B. Hein (TU Graz, Austria); Michael Steinberger (TU Graz, Austria); Christian Steger (TU Graz, Austria); Reinhold Weiss (TU Graz, Austria)

Adaptive Router Deployment for Multimedia Services in Mobile Pervasive Environments, Karen Miranda (Inria Lille - Nord Europe, France); Enrico Natalizio (INRIA Lille - Nord Europe, France); Tahiry Razafindralambo (INRIA Lille - Nord Europe, France); Antonella Molinaro (University "Mediterranea" of Reggio Calabria, Italy)

Grapevine: Efficient Situational Awareness in Pervasive Computing Environments, Evan T Grim (The University of Texas at Austin, USA); Chien-Liang Fok (The University of Texas at Austin, USA); Christine Julien (The University of Texas at Austin, USA)

HuMan: Creating Memorable Fingerprints of Mobile Users, Payas Gupta (Singapore Management Univ., Singapore); Kiat Wee Tan (Singapore Management Univ., Singapore); Narayan Ramasubbu (Singapore Management Univ., Singapore); David Lo (Singapore Management Univ., Singapore); Debin Gao (Singapore Management Univ., Singapore); Rajesh K Balan (Singapore Management Univ., Singapore)

16:30-18:30 Reception – Room B

Wednesday, 21 March, 2012

8:00-17:30 Registration – Room D

8:45-10:00 Keynote – Room A (Theater)

Keynote Speaker: **Prof. Paul Lukowicz** - DFKI Kaiserslautern, and University of Passau, Germany, "*Context to the People: What will it take to make activity recognition systems suitable for consumer applications*".

10:00-10:30 Coffee Break – Room B2-3

10:30 – 12:00 Session 3: Best Paper Session – Room A (Theater)

Session chair: **Albrecht Schmidt**, University of Stuttgart, Germany

SmartCap: Flattening Peak Electricity Demand in Smart Homes

Sean K Barker (University of Massachusetts Amherst, USA); Aditya Kr Mishra (University of Massachusetts Amherst, USA); David Irwin (University of Massachusetts, Amherst, USA); Prashant Shenoy (University of Massachusetts, Amherst, USA); Jeannie R Albrecht (Williams College, USA)

NaviComf: Navigate Pedestrians for Comfort Using Multi-modal Environmental Sensors

Congwei Dang (The University of Tokyo & Institute of Industrial Science, Japan); Masayuki Iwai (the University of Tokyo & Institute of Industrial Science, Japan); Kazunori Umeda (Chuo University, Japan); Yoshito Tobe (Tokyo Denki University, Japan); Kaoru Sezaki (University of Tokyo, Japan)

What Does Model-Driven Data Acquisition Really Achieve in Wireless Sensor Networks?

Usman Raza (University of Trento, Italy); Alessandro Camera (University of Trento, Italy); Amy L Murphy (Fondazione Bruno Kessler - IRST, Italy); Themis Palpanas (University of Trento, Italy); Gian Pietro Picco (University of Trento, Italy)

12:00-13:30 Lunch – Room B2-3

13:30-14:45 Session 4A – Mobility (concise papers – parallel) – Room B1

Session chair: **Ichiro Satoh**, National Institute of Informatics, Japan

Mobile Sensing of Pedestrian Flocks in Indoor Environments using WiFi Signals

Mikkel Baun Kjærgaard (ETH Zürich, Switzerland); Martin Wirz (ETH Zurich, Switzerland); Daniel Roggen (ETH Zürich, Switzerland); Gerhard Tröster (Wearable Computing Lab ETH Zürich, Switzerland)

A Location-Based Incentive Mechanism for Participatory Sensing Systems with Budget Constraints

Luis Jaimes (University of South Florida, USA); Idalides Vergara-Laurens (University of South Florida, USA); Miguel A. Labrador (University of South Florida, USA)

A Hybrid Method for achieving High Accuracy and Efficiency in Object Tracking using Passive RFID

Lei Yang (The Hong Kong Polytechnic University, Hong Kong); Jiannong Cao (Hong Kong Polytechnic Univ, Hong Kong); Weiping Zhu (The Hong Kong Polytechnic University, Hong Kong); Shaojie Tang (Illinois Institute of Technology, USA)

13:30-14:45 Session 4B – Systems and Sensing (concise papers – parallel) – Room A (Theater)

Session chair: **Daniela Nicklas**, Carl von Ossietzky University Oldenburg, Germany

An Efficient Dataflow Execution Method for Mobile Context Monitoring Applications

Younghyun Ju (KAIST, Korea); Chulhong Min (KAIST, Korea); Youngki Lee (KAIST, Korea); Jihyun Yu (KAIST, Korea); Junehwa Song (KAIST, Korea)

How Close is Close Enough ? Understanding the Role of Cloudlets in Supporting Display Appropriation by Mobile Users Sarah Clinch (Lancaster University, United Kingdom); Jan Harkes (Carnegie Mellon University, USA); Adrian Friday (Lancaster University, United Kingdom); Nigel Davies (Lancaster University, United Kingdom); Mahadev Satyanarayanan (Carnegie Mellon University, USA)

Directional Handoff using Geomagnetic Sensor in Indoor WLANs

Sangyup Han (KAIST, Korea); Myungchul Kim (KAIST, Korea); Ben Lee (Oregon State University, USA); Sungwon Kang (KAIST, Korea)

14:45-15:15 Coffee Break – Room B2-3

15:15-15:45 IBM PhD Forum on Pervasive Computing and Communications

Teaser Madness – Room A

15:45-17:15 IBM PhD Forum on Pervasive Computing and Communications – Room B2-3

Session chair: Jadwiga Indulska, University of Queensland, Australia

A Ubiquitous System for Smart Reasoning for Well-Being at Home and at Work Steven Bosems (University of Twente, The Netherlands)

Processing the Uncertainty: Quality-aware data stream processing for dynamic context models Christian Kuka (OFFIS, Germany)

Erlang meets WSNs: a functional approach to WSN programming Alessandro Sivieri (Politecnico di Milano, Italy)

Concepts for Service Provision in Disaster Environments Kamill Panitzek (Technische Universität Darmstadt, Germany)

User Context Recognition for Navigation Systems in Public Transportation Paul Baumann (TU Darmstadt, Germany)

Mining Individual Behavior Pattern Based on Significant Locations and Spatial Trajectories Zhenyu Chen (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)

Towards a Digital Object Memory Architecture Jens Hupert (German Research Center for Artificial Intelligence (DFKI), Germany)

A Smartphone-Based Energy Efficient and Intelligent Multi-Technology System for Localization and Movement Prediction Michela Papandrea (University of Applied Sciences of Southern Switzerland Switzerland (SUPSI), Switzerland)

COSN: A Collaborative Opportunistic Sensor Networking Framework for People-Centric Applications Kamini Garg (SUPSI, Switzerland)

A Generic Context Aware Gesture Recognition Framework for Smart Environments Mathias Wilhelm (TU Berlin, Germany)

Independent way-finding for visually impaired users through multi-sensorial data analysis on mobile devices Dragan Ahmetovic (University of Milan, Italy)

Mobilizing Search of the Here and Now Jonas Michel (University of Texas at Austin, USA)

Personalization in Pervasive Spaces towards Smart Interactions Design Rui Neves Madeira (ESTSetúbal/IPS, Portugal)

Towards Self-Learning Radio-Based Localization Systems Islam Alyafawi (University of Bern, Switzerland)

An Interactive User Interface Adaptation Process Veit Schwartz (TU-Berlin, Germany)

Application-aware Techniques for Energy Efficient Data Collection in Wireless Sensor Networks Usman Raza (University of Trento, Italy)

Self-aware Middleware for Smart Camera networks Herwig Guggi (Alpen Adria Universität Klagenfurt, Austria)

The application of Domain-specific languages within distributed computing Antonio Kheirkhazadeh (University of West London, United Kingdom)

Event based content fusion in Opportunistic Environments Michael Madhukalya (The University of Texas at Arlington, USA)

19:30 Social Dinner: Casinò Lugano



Thursday, 22 March, 2012

8:00-17:30 Registration – Room D

8:30-10:00 Panel Session – Room B2-3

Session chair: Anita La Salle, National Science Foundation, USA

Panel: "**Pervasive Computing: Is the Devil in the Details?**"

Panelists:

Dr. Mischa Dohler, Centre Tecnològic de Telecomunicacions de Catalunya-CTTC, Spain.

Dr. Christine Julien, The University of Texas at Austin, USA

Dr. Matt Mutka, Michigan State University, USA

Dr. Kay Römer, University of Lübeck, Germany

10:00-10:30 Coffee Break – Hall

10:30 – 12:00 Session 5: Privacy – Room B2-3

Session chair: Urs Hengartner, University of Waterloo, Canada

IncogniSense: An Anonymity-preserving Reputation Framework for Participatory Sensing Applications

Delphine Christin (Technische Universität Darmstadt, Germany); Christian Roßkopf (Technische Universität Darmstadt, Germany); Matthias Hollick (Technische Universität Darmstadt & Secure Mobile Networking Lab, Center for Advanced Security Research Darmstadt, Germany); Leonardo Martucci (TU Darmstadt, Germany); Salil Kanhere (University of New South Wales, Australia)

Enhancing Privacy in Participatory Sensing Applications with Multidimensional Data

Michael M Groat (University of New Mexico, USA); Benjamin Edwards (University of New Mexico, USA); James Horey (Oak Ridge National Laboratory, USA); Wenbo He (University of Nebraska-Lincoln, USA); Stephanie Forrest (University of New Mexico, USA)

PShare: Position Sharing for Location Privacy based on Multi-Secret Sharing

Marius Wernke (University of Stuttgart IPVS, Germany); Frank Dürr (University of Stuttgart, Germany); Kurt Rothermel (University of Stuttgart, Germany)

12:00-13:30 Lunch – Hall

13:30-15:00 Session 6: Indoor Localisation – Room B2-3

Session chair: Christian Becker, University of Mannheim, Germany

Optimal Tag Placement for Indoor Localization

Stephan J Wagner (University of Duisburg-Essen, Germany); Marcus Handte (University of Duisburg-Essen, Germany); Marco Antonio Zuniga (University Of Duisburg-Essen, Germany); Pedro Jose Marrón (University of Duisburg-Essen and Fraunhofer FKIE, Germany)

Investigation of indoor localization with ambient FM radio stations

Andrei Popleteev (Create-Net, Italy); Venet Osmani (Create-Net, Italy); Oscar Mayora (CreateNet, Italy)

RASID: A Robust WLAN Device-free Passive Motion Detection System

Ahmed E. Kosba (Alexandria University, Egypt); Ahmed M Saeed (Egypt-Japan University for Science and Technology, Egypt); Moustafa Youssef (Egypt-Japan University of Science and Technology (E-JUST), Egypt)

15:00-15:30 Coffee Break – Hall

15:30-17:10 Session 7A – Context for Applications (concise papers – parallel) – Room B1

Session chair: Christine Julien, University of Texas at Austin, USA

Leveraging smart meter data to recognize home appliances

Markus Weiss (ETH Zurich, Switzerland); Adrian Helfenstein (ETH Zurich, USA); Friedemann Mattern (ETH Zürich, Switzerland); Thorsten Staake (ETH Zurich, Switzerland)

Enabling Energy-Efficient Context Recognition with Configuration Folding

Umer Iqbal (Universität Duisburg-Essen Germany, Germany); Marcus Handte (University of Duisburg-Essen, Germany); Stephan J Wagner (University of Duisburg-Essen, Germany); Wolfgang Apolinarski (University of Duisburg-Essen, Germany); Pedro Jose Marrón (University of Duisburg-Essen and Fraunhofer FKIE, Germany)

Evaluating Mobility Models for Temporal Prediction with High-Granularity Mobility Data

Yohan Chon (Yonsei University, Korea); Hyojeong Shin (Yonsei University, Korea); Elmurod Talipov (Yonsei University, Korea); Hojung Cha (Yonsei University, S. Korea, Korea)

15:30-17:10 Session 7B – Applications in Sensing (concise papers – parallel) – Room B2-3

Session chair: Franco Zambonelli, University of Modena and Reggio, Italy

GymSkill: A Personal Trainer for Physical Exercises

Andreas Möller (Technische Universität München, Germany); Luis Roalter (Technische Universität München, Germany); Stefan Diewald (Technische Universität München, Germany); Johannes Scherr (Technische Universität München, Germany); Matthias Kranz (Technische Universität München, Germany); Nils Hammerla (Newcastle University, United Kingdom); Patrick Olivier (Newcastle University, United Kingdom); Thomas Plötz (Newcastle University, United Kingdom)

Encounter-based Noise Cancellation For Cooperative Trajectory Mapping

Wei Chang (Temple University, USA); Jie Wu (Temple University, USA); Chiu C. Tan (Temple University, USA)

Sensing-Enabled Defenses to RFID Unauthorized Reading and Relay Attacks without Changing the Usage Model

Tzipora Halevi (Polytechnic Institute of New York University, USA); Sein Lin (Polytechnic Institute of New York University, USA); Di Ma (University of Michigan-Dearborn, USA); Anudath Prasad (University of Michigan-Dearborn, USA); Nitesh Saxena (Polytechnic Institute of New York University, USA); Jonathan Voris (Columbia University, USA); Tuo Xiang (University of Michigan-Dearborn, USA)

Friday, 23 March, 2012

WORKSHOPS

CoMoRea: Workshop on Context Modeling and Reasoning – **Room B2**

PerEL: Workshop on Pervasive Learning, Life and Leisure – **Room C1**

MP2P: Workshop on Mobile Peer-to-Peer Computing – **Room C2**

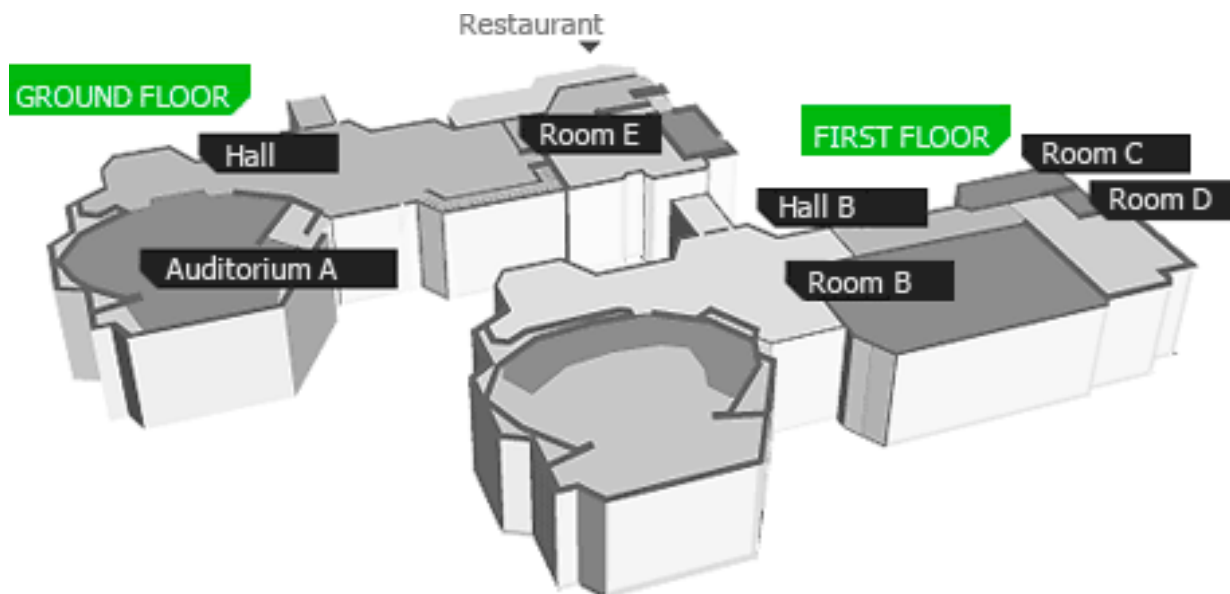
PWN: Workshop on Pervasive Wireless Networking

PerNEM: Workshop on Pervasive Networks for Emergency Management –
Room C3

SIPC: Workshop on Social Implications of Pervasive Computing – **Room D**

SeNAml: Workshop on Sensor Networks and Ambient Intelligence – **Room B1**

PWN: Workshop on Pervasive Wireless Networking – **Room E**



Coffee Break: 10:00-10:30 – Room B3

Lunch: 12:00-13:30 – Room B3

Coffee Break: 15:00-15:30 – Room B3