



IEEE PerCom 2014 Program



Budapest, Hungary | March 24-28, 2014

CONFERENCE REGISTRATION

Lobby/Foyer

REGISTRATION HOURS ARE:

Monday, March 24: from 7:30 am to 4:30 pm

Tuesday, March 25: from 7:30 am to 4:00 pm

Wednesday, March 26: from 8:30 am to 4:00 pm

Thursday, March 27: from 8:30 am to 3:30 pm

Friday, March 28: from 8:30 am to 1:30 pm

SPONSORS:



IBM Research



Workshop Locations at a Glance

Monday, March 24

Pre-conference Workshops and Symposia

Workshop/Symposium name:	Room:
ACoMoRe (The 1st Symposium on Activity and Context Modeling and Recognition)	<i>Marcus</i>
CROWDSENSING (The 1st International Workshop on Crowdsensing Methods, Techniques, and Applications)	<i>Atrium</i>
PerCity (The 1st International IEEE Workshop on Pervasive Systems for Smart Cities)	<i>Galenus</i>
PerMoby (The 3rd International Workshop on the Impact of Human Mobility in Pervasive Systems and Applications)	<i>Sabina</i>
PerNEM (The 4th International Workshop on Pervasive Networks for Emergency Management)	<i>Hadrianus B</i>
SIPC: (The 3rd International Workshop on the Social Implications of Pervasive Computing for Sustainable Living)	<i>Hadrianus A</i>

Friday, March 28

Post-conference Workshops

Workshop/Symposium name:	Room:
IQ2S (The 6th International Workshop on Information Quality and Quality of Service for Pervasive Computing)	<i>Marcus</i>
MUCS (The 11th IEEE International Workshop on Managing Ubiquitous Communications and Services)	<i>Hadrianus B</i>
PD-Apps (The 1st Workshop on Developing Applications for Pervasive Display Networks)	<i>Galenus</i>
PerCol (The 5th International Workshop on Pervasive Collaboration and Social Networking)	<i>Sabina</i>
SCI (The 2nd International Workshop on Social and Community Intelligence)	<i>Tractus</i>
SeSoc (The 6th IEEE International Workshop on Security and Social Networking)	<i>Atrium</i>

Monday, March 24

Pre-conference Workshops

Morning coffee break: 10:00 am – 10:30 am » Foyer

Afternoon coffee break: 3:00 pm – 3:30 pm » Foyer

Lunch: 12:00 pm – 1:30 pm » Ambrosia Restaurant

The 1st Symposium on Activity and Context Modeling and Recognition (ACoMoRe)

Location: Marcus

Session 1 – Introduction and Opening

9:15 am – 10:00 am

Chair: Daniela Nicklas (Carl von Ossietzky Universität Oldenburg, Germany)

- AC1.** “Do You Hear What I Hear? Using Acoustic Probing to Detect Smartphone Locations,”
Irina Diaconita (Multimedia Communications Lab, Technical University of Darmstadt, Germany); Andreas Reinhardt (The University of New South Wales, Australia); Frank Englert (TU Darmstadt, Germany); Delphine Christin (Technische Universität Darmstadt, Germany); Ralf Steinmetz (Technische Universität Darmstadt, Germany)

Session 2 – Smart Phone Based Sensing

10:30 am – 12:00 pm

Chair: Daniela Nicklas (Carl von Ossietzky Universität Oldenburg, Germany)

- AC2.** “Self-Calibration of Walking Speed Estimations Using Smartphone Sensors,”
Marco Altini (Holst Centre/imec-nl, The Netherlands); Marijn van Dort (Technical University Eindhoven, The Netherlands); Ruud Vullers (imec-Netherlands, The Netherlands); Chris Van Hoof (IMEC, Belgium); Oliver Amft (University of Passau, Germany)
- AC3.** “Personalised phone placement recognition in daily life using RFID tagging,”
Florian Wahl (University of Passau, Germany); Oliver Amft (University of Passau, Germany) (short paper)
- AC4.** “RingLearn: Long-term Mitigation of Disruptive Smartphone Interruptions,”
Jeremiah Smith (Imperial College, United Kingdom); Naranker Dulay (Imperial College London, United Kingdom)

Session 3 – Gesture and Activity Recognition

1:30 pm – 3:00 pm

Chair: Daniele Riboni (Università degli Studi di Milano, Italy)

- AC5.** “Regression Analysis for Gesture Recognition using RFID Technology,”
Kevin Bouchard (UQAC, Canada); Bruno Bouchard (Universite du Quebec a Chicoutimi, Canada); Abdenour Bouzouane (Universite du Quebec a Chicoutimi, Canada)
- CS6.** “New frequent pattern mining algorithm for activities models creation,”
Mohamed Tarik Moutacalli (UQAC, Canada); Abdenour Bouzouane (Universite du Quebec a Chicoutimi, Canada); Bruno Bouchard (Universite du Quebec a Chicoutimi, Canada)

- CS7.** “Dealing with human variability in motion based, wearable activity recognition,”
Matthias Kreil (DFKI Kaiserslautern, Germany); Bernhard Sick (University of Kassel, Germany);
Paul Lukowicz (DFKI and University of Kaiserslautern, Germany) (short paper)

Session 4 – Sensors and Smart Environments

3:30 pm – 4:45 pm *Chair: Matthias Wieland* (Universität Stuttgart, Germany)

- AC8.** “Itemset-based Mining of Constraints for Enacting Smart Environments,”
Viktoriya Degeler (University of Groningen, The Netherlands); Alexander Lazovik (University of Groningen, The Netherlands); Francesco Leotta (Sapienza University of Rome, Italy); Massimo Mecella (SAPIENZA -- Universita' di Roma, Italy) (short paper)
- AC9.** “Motion-adaptive duty-cycling to estimate orientation using inertial sensors,”
Adrian Derungs (Universität Passau, Germany); Han Lin (TU/e, The Netherlands); Holger Harms (Thales, Defence and Homeland Security, Switzerland); Oliver Amft (University of Passau, Germany)
- AC10.** “Novel Stochastic Model For Presence Detection Using Ultrasound Ranging Sensors,”
Luis I Lopera Gonzalez (University of Passau, Germany); Ulf Grossekathefer (TU/e, The Netherlands); Oliver Amft (University of Passau, Germany) (short paper)

Session 5 – Discussion and Closing Session

4:45 am – 5:15 am *Chair: Paul Lukowicz* (DFKI Kaiserslautern, Germany)

The 1st International Workshop on Crowdsensing Methods, Techniques, and Applications (CROWDSENSING)

Location: Atrium

Session 1 – Keynote Speech

9:05 am – 10:00 am *Chair: Jamie Payton* (University of North Carolina at Charlotte, USA)

- CSK.** “Participatory Urban Sensing: Challenges and Opportunities”
Sajal K. Das (Missouri University of Science and Technology, USA)

Session 2 – Collecting and Analyzing Crowdsensed Data

10:30 am – 12:00 pm *Chair: Spyros Lalis* (University of Thessaly, Greece)

- CS1.** “On Efficient Meta-Data Collection for Crowdsensing”
Luke Dickens (Imperial College London, United Kingdom); Emil Lupu (Imperial College London, United Kingdom)
- CS2.** “The Effectiveness of Centralised Management for Reducing Wasted Effort in Participatory Sensing,”
Mattias Linnap (University of Cambridge, United Kingdom); Andrew Rice (University of Cambridge, United Kingdom)

- CS3.** “Multitiered Inference Management Architecture for Participatory Sensing”
Stephen Pipes (IBM UK Ltd, United Kingdom); Supriyo Chakraborty (University of California at Los Angeles, USA)

Session 3 – Supporting Creation of and Contributions to Crowdsensing Applications

1:30 pm – 3:00 pm *Chair: Luke Dickens* (Imperial College London, United Kingdom)

- CS4.** “EasyHarvest: Supporting the Deployment and Management of Sensing Applications on Smartphones”
Manos Katsomallos (University of Thessaly, Greece); Spyros Lalis (University of Thessaly, Greece)
- CS5.** “CrowdOut: a Mobile Crowdsourcing Service for Road Safety in Digital Cities,”
Elian Aubry (Universite de Lorraine, France); Thomas Silverston (Universite de Lorraine, France); Abdelkader Lahmadi (LORIA, France); Olivier Festor (INRIA Nancy - Grand Est, France)
- CS6.** “SPREAD, a Crowd Sensing Incentive Mechanism to Acquire Better Representative Samples,”
Luis G Jaimes (University of South Florida, USA); Idalides Vergara-Laurens (University of South Florida, USA); Alireza Chakeri (University of South Florida, USA)
- CS7.** “Gamification-Based Incentive Mechanism for Participatory Sensing”
Yoshitaka Ueyama (Graduate School of Information Science, Nara Institute of Science and Technology, Japan); Morihiko Tamai (Nara Institute of Science and Technology, Japan); Yutaka Arakawa (Nara Institute of Science and Technology, Japan); Keiichi Yasumoto (Nara Institute of Science and Technology, Japan)

Session 4 – Panel Discussion

3:30 pm – 4:30 pm *Chair: Emil Lupu* (Imperial College London, UK)

- CSP.** “Crowdsensing: Silver Bullet or Naked Gun?” (Panelists TBA)

The 1st International IEEE Workshop on Pervasive Systems for Smart Cities (PerCity)

Location: Galenus

Session 1 – Keynote Speech

9:00 am – 10:00 am *Chair: Gregor Schiele* (Insight Galway, National University of Ireland Galway, Ireland)

- PCK.** “Energy, Technologies and Cities”
Manuel Serrano (ETRA I+D, Spain)

Session 2 – Smart City Applications

10:30 am – 12:00 pm *Chair: Wolfgang Apolinarski* (University of Duisburg-Essen, Germany)

- PC1.** “Smart Building Management through Augmented Reality,”
Larissa Suzuki (University College London, UK); Kevin Brown (IBM UK Ltd, UK); Stephen Pipes (IBM UK Ltd, UK); John B. Ibbotson (IBM UK Ltd, UK)

PC2. “Enabling Reliable and Secure IoT-based Smart City Applications”

Elias Tragos (Institute of Computer Science, FORTH, Greece); Vangelis Angelakis (Linköping University, Sweden); Alexandros Fragkiadakis (Institute of Computer Science, FORTH, Greece); David Gundlegård (Linköping University, Sweden); Septimiu Nechifor (Siemens SRL, Romania); George Oikonomou (University of Bristol, UK); Henrich Pöhls (University of Passau, Germany); Anastasius Gavras (Eurescom GmbH, Germany)

Session 3 – Smart City Systems

1:30 pm – 3:00 pm

Chair: Gregor Schiele (Insight Galway, National University of Ireland Galway, Ireland)

PC3. “The GAMBAS Middleware and SDK”

Wolfgang Apolinarski (University of Duisburg-Essen, Germany); Umer Iqbal (Universität Duisburg-Essen Germany, Germany); Josiane Parreira (Insight Galway, National University of Ireland Galway, Ireland)

PC4. “A lightweight Linked Data implementation for modeling the Web of Things,”

Stefano Turchi (CNIT, Italy); Federica Paganelli (National Inter-University Consortium for Telecommunications, Italy); Lorenzo Bianchi (University of Florence, Italy); Dino Giuli (CNIT - University of Firenze, Italy)

PC5. “Towards WSN-aided Navigation for Vehicles in Smart Cities: An Application Case Study,”

Roudy Dagher (Inria Lille - Nord Europe, France); Nathalie Mitton (Inria Lille - Nord Europe, France); Ibrahim Amadou (Inria Lille - Nord Europe, France)

Session 4 – Open Discussion

3:30 pm – 5:00 pm

Chair: Gregor Schiele (Insight Galway, National University of Ireland Galway, Ireland)

PCD. “Pervasive Computing for Smart Cities - Past, Present and Future”

The 3rd International Workshop on the Impact of Human Mobility in Pervasive Systems and Applications (PerMoby)

Location: Sabina

Session 1 – Keynote Lecture

9:00 am – 10:00 am

Chair: Daniele Puccinelli University of Applied Sciences of Southern Switzerland, Switzerland)

PMK. “Long-Term Monitoring of Human Mobility on Smartphones”

Petteri Nurmi (University of Helsinki, Finland)

Session 2 – Usage Patterns and Social Networking

10:30 am – 12:00 pm

Chair: TBA (TBA)

PM1. “Re-identification of Anonymized CDR datasets Using Social Network Data,”

Alket Cecaj (Università di Modena e Reggio Emilia, Italy); Marco Mamei (Università di Modena e Reggio Emilia, Italy); Nicola Biccocchi (University of Modena and Reggio Emilia, Italy)

- PM2.** “Community Detection in Opportunistic Networks using Memory-based Cognitive Heuristics,”
Matteo Mordacchini (IIT, CNR, Pisa, Italy); Andrea Passarella (IIT-CNR, Italy); Marco Conti (IIT-CNR, Italy)
- PM3.** “The evolution of user mobility on the eduroam network,”
Nuno Cruz (Instituto Politecnico de Lisboa & Universidade de Lisboa, Portugal); Hugo Miranda (Universidade de Lisboa, Portugal); Pedro Ribeiro (ISEL-IPL, Portugal)

Session 3 – Understanding Human Mobility

1:30 pm – 3:00 pm *Chair:* TBA (TBA)

- PM4.** “Impact of Location History Collection Schemes on Observed Human Mobility Features,”
Alicia Rodriguez-Carrion (University Carlos III of Madrid & Missouri University of Science & Technology, Spain); Sajal K. Das (Missouri University of Science and Technology, USA); Celeste Campo (University Carlos III of Madrid, Spain); Carlos Garcia-Rubio (University Carlos III of Madrid, Spain)
- PM5.** “On the key features in human mobility: relevance, time and distance,”
Matteo Zignani (University of Milano, Italy); Michela Papandrea (University of Applied Sciences of Southern Switzerland Switzerland (SUPSI), Switzerland); Sabrina Gaito (Università degli Studi di Milano, Italy); Silvia Giordano (University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland); Gian Paolo Rossi (Università degli Studi di Milano, Italy)
- PM6.** “Navigating MazeMap: indoor human mobility, spatio-logical ties and future potential,”
Gergely Biczók (Norwegian University of Science and Technology, Norway); Santiago Diez Martínez (NTNU, Norway); Thomas Jelle (Norwegian University of Science and Technology, Norway); John Krogtstie (Norwegian University of Science and Technology, Norway)

Session 4 – Data in Pervasive Mobility

3:30 pm – 4:30 pm *Chair:* TBA (TBA)

- PM7.** “Analyzing the quality of crowd sensed WiFi data,”
Carlos M Pérez-Penichet (University of Minho, Portugal); Adriano Moreira (University of Minho & Centro Algoritmi, Portugal)
- PM8.** “Mobile P2P Queries over Temporal Data,”
Steven Mudda (University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland); Silvia Giordano (University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland)

The 4th International Workshop on Pervasive Networks for Emergency Management (PerNEM)

Location: Hadrianus B

Session 1 – Keynote Speech

9:00 am – 10:00 am *Chair:* Erol Gelenbe (Imperial College, UK)

- PNK.** “ChaosFIRE: An Experiment with Chaoster, the Context-Aware Collaboration Platform for Crisis/Chaos Management”
László Kovács and Balázs E. Pataki (MTA SZTAKI, Hungary)

Session 2 – Emergency Communication Systems

10:30 am – 12:00 pm *Chair: Balázs E. Pataki (MTA SZTAKI, Hungary)*

- PN1.** “Publish-Subscribe Smartphone Sensing Platform for the Acute Phase of a Disaster: A Framework for Emergency Management Support,”
Jaziar Radianti (University of Agder, Center of Integrated Emergency Management, Norway); Jose J Gonzalez (Center for Integrated Emergency Management (CIEM) University of Agder, Norway); Ole-Christoffer Granmo (University of Agder, Norway)
- PN2.** “Routing Diverse Evacuees with Cognitive Packets,”
Huibo Bi (Imperial College London, United Kingdom); Erol Gelenbe (Imperial College London, United Kingdom)
- PN3.** “Quake Detection System Using Smartphone-Based Wireless Sensor Network For Early Warning,”
Ana Zambrano (Universitat Politècnica de València, Spain); Israel Pérez (Universidad Politécnica de Valencia, Spain); Carlos E Palau (Universidad Politecnica Valencia, Spain); Manuel Esteve (Universidad Politecnica Valencia, Spain)

Session 3 – Algorithms and Models for Emergency Networks

1:30 pm – 3:00 pm *Chair: Panayiotis Kolios (University of Cyprus, Cyprus)*

- PN4.** “Qualifying Explore and Exploit for Efficient Data Dissemination in Emergency Adhoc Networks,”
Panayiotis Kolios (University of Cyprus, Cyprus); Andreas Pitsillides (University of Cyprus, Cyprus); Osnat (Ossi) Mokryn (Tel Aviv Yaffo Academic College, Israel); Katerina Papadaki (London School of Economics, United Kingdom)
- PN5.** “Resource Delivery Path Dependent Deployment Scheduling for Contingency Cellular Network,”
Yao-Nan Lien (National Chengchi University, Taiwan); Tsai-I Kao (National Chengchi University, Taiwan); Jyh-Shyan Huang (National Chengchi University, Taiwan)
- PN6.** “Near-Optimal Emergency Evacuation,”
Erol Gelenbe (Imperial College London, United Kingdom); Qing Han (Imperial College, United Kingdom)

Session 4 – Emergency Management Systems

3:30 pm – 5:30 pm *Chair: Antoine Desmet (Imperial College London, UK)*

- PN7.** “On-body multi-input indoor localization for dynamic emergency scenarios: fusion of magnetic tracking and optical character recognition with mixed-reality display,”
Jason Orlosky (Osaka University, USA); Takumi Toyama (German Research Center for Artificial Intelligence, Germany); András Sárkány (Eötvös Loránd University, Hungary); András Lőrincz (Eötvös Loránd University, Hungary); Daniel Sonntag (DFKI Germany, Germany)
- PN8.** “Time of Flight Error Compensation for In-Tunnel Vehicle Localization,”
Katarina Balać (University of Lugano, Switzerland); Pablo Andres Di Giulio (University of Lugano, Switzerland); Antonio V. Taddeo (University of Lugano, Switzerland); Mauro Prevostini (University of Lugano, Switzerland)

- PN9.** “Capacity Based Evacuation with Dynamic Exit Signs,”
Antoine Desmet (Imperial College London, United Kingdom); Erol Gelenbe (Imperial College London, United Kingdom)
- PN10.** “Physical Indicators of Cyber Attacks Against a Rescue Robot,”
Tuan Vuong (University of Greenwich, United Kingdom); Avgoustinos Filippoupolitis (University of Greenwich, United Kingdom); George Loukas (University of Greenwich, United Kingdom); Diane E Gan (University of Greenwich, United Kingdom)

The 3rd International Workshop on the Social Implications of Pervasive Computing for Sustainable Living (SIPC)

Location: Hadrianus A

Session 1 – Keynote Speech

9:00 am – 10:00 am *Chair: Stuart Moran* (University of Nottingham, UK)

- SIK.** “Pervasive Computing for Sustaining Cultural Heritage”
Zsófia Ruttkay (Creative Technology Lab, Hungary)

Session 2 – World Cafe

10:30 am – 12:00 pm *Chair: Stuart Moran* (University of Nottingham, UK)

- SID.** “A novel and stimulating group exercise...” all are welcome

Session 3 – Healthy Living

1:30 pm – 2:10 pm *Chair: Stuart Moran* (University of Nottingham, UK)

- SI1.** “Pervasive Stress Recognition for Sustainable Living,”
Andrey Bogomolov (University of Trento, Italy); Bruno Lepri (FBK-Irst, Italy); Michela Ferron (Fondazione Bruno Kessler, Italy); Fabio Pianesi (FBK, Italy); Alex Pentland (MIT, USA)
- SI2.** “Ethics of E-Coaching: Implications of Employing Pervasive Computing to Promote Healthy and Sustainable Lifestyles,”
Joel Anderson (Utrecht University, The Netherlands); Bart Kamphorst (Utrecht University, The Netherlands)

Session 4 – Adaptive Spaces

2:10 pm – 3:00 pm *Chair: Irene Lopez de Vallejo* (Connected Digital Economy Catapult, UK)

- SI3.** “Pervasive Connectivity: The Thriving Hotel of the Future,”
Howard A Hecht (IndustryLabs, Canada); Mahemuti Mayier (Johnson & Wales University, USA); Christine Perakslis (Johnson & Wales University, USA)
- SI4.** “Using Adaptive Architecture to Support Yoga Practices: Social Considerations for Design,”
Nils Jäger (University of Nottingham, United Kingdom); Stuart Moran (University of Nottingham, United Kingdom); Holger Martin Schnädelbach (University of Nottingham, United Kingdom)

Session 5 – Collecting and Sharing Data

3:30 pm – 4.10 pm

Chair: Irene Lopez de Vallejo (Connected Digital Economy Catapult, UK)

- S15.** “Social Networks and Ubiquitous Monitoring: An Application of the PSA-BI Model,”
Stuart Moran (University of Nottingham, UK)
- S16.** “Field Testing a Rare Species Bioacoustic Smartphone Application: Challenges and Future Considerations,”
Nadia Pantidi, Stuart Moran, Khaled Bachour, Tom Rodden (University of Nottingham, UK);
Davide Zilli, Geoff V Merrett and Alex Rogers (University of Southampton, UK)

Session 6 – Communities and Choice

4:10pm – 5:00pm

Chair: Stuart Moran (University of Nottingham, UK)

- S17.** “Can we reduce waste and waist together through EUPHORIA?”
Veranika Lim (Eindhoven University of Technology, The Netherlands); Fulya Yalvaç (Eindhoven University of Technology, The Netherlands); Mathias Funk (Eindhoven University of Technology, The Netherlands); Jun Hu (Eindhoven University of Technology, The Netherlands); Matthias Rauterberg (Eindhoven University of Technology, The Netherlands)
- S18.** “The Value of Consent: discussions with designers of ubiquitous computing systems,”
Ewa Luger (University of Nottingham, United Kingdom); Tom Rodden (University of Nottingham, United Kingdom)

■ Tuesday, March 25

Conference Opening

Hadrianus

8:30 am – 8:45 am

Chairs: Károly Farkas (Budapest University of Technology and Economics, Hungary)

Gergely Záruba (The University of Texas at Arlington, USA)

George Roussos (Birkbeck College, Uni. of London, UK)

Keynote Lecture

Hadrianus

8:45 am – 10:00 am

Chair: Jian-nong Cao (Hong Kong Polytechnic University, Hong Kong)

K1. “WInternet: From Net of Things to Internet of Things”

Prof. Wei Zhao (The University of Macau, Macau)

Coffee/Tea Break

Foyer

10:00 am – 10:30 am

Session 1 – Context and Activity Recognition

Hadrianus

10:30 am – 12:00 pm

Chair: Christine Julien (The University of Texas at Austin, USA)

1A1. “Kintense: A Robust, Accurate, Real-Time and Evolving System for Detecting Aggressive Actions from Streaming 3D Skeleton Data,”

S. M. Shahriar Nirjon (University of Virginia, USA); Christopher Greenwood (University of Virginia, USA); Carlos Torres (University of Virginia, USA); Stefanie Zhou (University of Virginia, USA); John Stankovic (University of Virginia, USA); Hee Jung Yoon (DGIST, Korea); Ho-Kyeong Ra (DGIST, Korea); Can Basaran (DGIST, USA); Taejoon Park (Daegu Gyeongbuk Institute of Science and Technology, Korea); Sang Son (DGIST, Korea)

1A2. “Nonparametric Discovery of Human Routines from Sensor Data,”

Feng-Tso Sun (Carnegie Mellon University, USA); Yi-Ting Yeh (Stanford University, USA); Heng-Tze Cheng (Carnegie Mellon University, USA); Cynthia Kuo (Carnegie Mellon University, USA); Martin Griss (Carnegie Mellon University, USA)

1A3. “Fixed-lag Particle Filter for Continuous Context Discovery Using Indian Buffet Process”

Thuong C. Nguyen (Deakin University, Australia); Sunil Gupta (Deakin University, Australia); Svetha Venkatesh (Deakin University, Australia); Dinh Q. Phung (Deakin University, Australia)

Lunch

Ambrosia Restaurant

12:00 pm – 1:30 pm

1:30 pm – 2:50 pm*Chair: Kay Römer* (Graz University of Technology, Austria)

- 2A1.** “Using Rule Mining to Understand Appliance Energy Consumption Patterns,”
Sami Rollins (University of San Francisco, USA); Nilanjan Banerjee (University of Maryland, Baltimore County, USA)
- 2A2.** “SocketWatch: An Autonomous Appliance Monitoring System,” (concise)
Tanuja Ganu (IBM Research - India, India); Dwi Rahayu (Monash University, Australia); Deva P. Seetharam (IBM Research - India, India); Rajesh Kunnath (Radio Studio, India); Ashok Pon Kumar (IBM Research, India); Vijay Arya (IBM Research - India, India); Saiful A. Husain (Universiti Brunei Darussalam, Brunei Darussalam); Shivkumar Kalyanaraman (IBM Research - India, Bangalore, India)
- 2A3.** “Personalized Energy Auditor: Estimating Personal Electricity Usage,” (concise)
Seungwoo Lee (Yonsei University, Korea); Daye Ahn (Hongik University, Korea); Sukjun Lee (Yonsei University, Korea); Rhan Ha (Hongik University, Korea); Hojung Cha (Yonsei University, S. Korea, Korea)

Coffee/Tea Break

Foyer

2:50 pm – 3:30 pm

Demo and Work-in-Progress “Teaser Madness”

Hadrianus

3:30 pm – 4:00 pm

Chairs: Max Mühlhäuser (Technical University Darmstadt, Germany),
Jamie Payton (University of North Carolina at Charlotte, USA),
Gregor Schiele (Digital Enterprise Research Institute, Ireland),
Tom Martin (Virginia Polytechnic Institute and State University, USA)

Demo Session (parallel)

Foyer Mithras & Gallery

4:00 pm – 6:00 pm

Chairs: Max Mühlhäuser (Technical University Darmstadt, Germany),
Jamie Payton (University of North Carolina at Charlotte, USA)

- D1.** “GaitAssist: A Wearable Assistant for Gait Training and Rehabilitation in Parkinson’s Disease,”
Sinziana Mazilu (Swiss Federal Institute of Technology, Switzerland); Michael Hardegger (ETH Zurich, Switzerland); Ulf Blanke (ETH Zürich, Germany); Gerhard Tröster (Wearable Computing Lab ETH Zürich, Switzerland); Eran Gazit (Tel Aviv Sourasky Medical Center, Israel); Moran Dorfman (Tel Aviv Sourasky Medical Center, Israel); Jeffrey Hausdorff (Harvard Medical School, USA)
- D2.** “The Mobile Manufacturing Dashboard,”
Christoph Gröger (University of Stuttgart, Germany); Christoph Stach (University of Stuttgart, Germany)

- D3.** “Participatory Sensing Based Real-time Public Transport Information Service,”
Karoly Farkas (Budapest University of Technology and Economics, Hungary); Adam Nagy (Budapest University of Technology and Economics, Hungary); Timon Tomás (Budapest University of Technology and Economics, Hungary); Robert Szabo (Budapest University of Technology and Economics, Hungary)
- D4.** “RAREFall - Real-time Activity Recognition and Fall Detection System,”
Hristijan Gjoreski (Jozef Stefan Institute, Slovenia); Simon Kozina (Jozef Stefan Institute, Slovenia); Matjaž Gams (Jozef Stefan Institute, Slovenia); Mitja Lustrek (Jozef Stefan Institute, Slovenia)
- D5.** “Code Offloading on Opportunistic Computing,”
Alan Ferrari (SUPSI, Switzerland); Daniele Puccinelli (University of Applied Sciences of Southern Switzerland, Switzerland); Silvia Giordano (University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland)
- D6.** “Proximity-based reminders using Bluetooth,”
Håkan Jonsson (University of Lund, Sweden); Pierre Nugues (Lund University, Sweden); Alex Tavella (Venturus, Brazil); Izabela Amaral (Venturus, Brazil); Marina Tachibana (Venturus, Sweden); Vinicius Santos (Venturus, Brazil)
- D7.** “A Testbed Infrastructure to Study the Impact of Temperature on WSN,”
Carlo Alberto Boano (Graz University of Technology, Austria); Kay Römer (Graz University of Technology, Austria); James Brown (Lancaster University, United Kingdom); Utz Roedig (Lancaster University, United Kingdom); Marco Zuniga (Delft University of Technology, The Netherlands)
- D8.** “MadApp: Dynamic Content Support for Delay-Tolerant Web Applications,”
Venkat Srinivasan (The University of Texas at Austin, USA); Christine Julien (The University of Texas at Austin, USA)
- D9.** “Resilient Tree-based Live Streaming for Mobile Scenarios,”
Giang Nguyen (TU Darmstadt, Germany); Benjamin Schiller (TU Darmstadt, Germany); Thorsten Strufe (TU Darmstadt, Germany)
- D10.** “User-friendly Configuration of Smart Environments,”
Simon Mayer (ETH Zürich, Switzerland); Nadine Inhelder (ETH Zurich, Switzerland); Ruben Verborgh (Ghent University – iMinds, Belgium); Rik Van de Walle (Ghent University - IBBT, Belgium)

Work-in-Progress Poster Session (parallel)

Foyer Mithras & Gallery

4:00 pm – 6:00 pm

Chairs: Gregor Schiele (Digital Enterprise Research Institute, Ireland),
Tom Martin (Virginia Polytechnic Institute and State University, USA)

- W1.** “Sensor Network System to Promote Energy Conservation,”
Koichi Kuzume (Yuge National College of Maritime Technology, Japan); Masakazu Okada (Yuge National College of Technology, Japan)
- W2.** “New Approach to Emotional Information Exchange: Experience Metaphor Based on Life Logs,”
Masanobu Abe (Okayama University, Japan); Daisuke Fujioka (University of Okayama, Japan); Kazuto Hamano (University of Okayama, Japan); Sunao Hara (Okayama University, Japan); Rika Mochizuki (NTT Service Evolution Laboratories, Japan); Tomoki Watanabe (NTT Corporation, Japan)

- W3.** “MemorySense: Reconstructing and Ranking User Memories on Mobile Devices,”
Karl Aberer (EPFL, Switzerland); Michele Catasta (EPFL, Switzerland); Horia Radu (EPFL, Switzerland); Jean-Eudes Ranvier (EPFL, Switzerland); Matteo Vasirani (EPFL, Switzerland); Zhixian Yan (Samsung Research America - Silicon Valley, USA)
- W4.** “Deal or No Deal: Catering to User Preferences,”
Kartik Muralidharan (Singapore Management University, Singapore); Swapna Gottipati (Singapore Management University, Singapore); Rajesh K Balan (Singapore Management University, Singapore)
- W5.** “Context-aware energy-efficient wireless sensor architecture for body activity recognition,”
Tifenn Rault (University of Technology of Compiègne, France); Abdelmadjid Bouabdallah (Universite de Technologie - Compiègne, France); Yacine Challal (University of Technology of Compiègne, France); Frederic Marin (University of Technology of Compiègne (UTC), France)
- W6.** “A Cost-Effective Approach to Software-in-the-Loop Simulation of Pervasive Systems and Applications,”
Giacomo Brambilla (University of Parma, Italy); Alessandro Grazioli (University of Parma, Italy); Marco Picone (University of Parma, Italy); Francesco Zanichelli (University of Parma, Italy); Michele Amoretti (University of Parma, Italy)
- W7.** “Architecting Information Centric ETSI-M2M systems,”
Luigi Alfredo Grieco (Politecnico di Bari, Italy); Mahdi Ben Alaya (LAAS-CNRS, France); Thierry Monteil (LAAS-CNRS and Univ\ de Toulouse, France); Khalil Drira (LAAS-CNRS, France)
- W8.** “Auth-Lite: Lightweight M2M Authentication Reinforcing DTLS for CoAP,”
Arijit Ukil (TCS, India); Soma Bandyopadhyay (TATA Consultancy Services, India); Abhijan Bhattacharyya (Tata Consultancy Services Ltd, India); Arpan Pal (Tata Consultancy Services, India); Tulika Bose (TCS, India)
- W9.** “A Distributed Execution Environment Enabling Resilient Processes for Ubiquitous Systems,”
Ronny Seiger (Technische Universitaet Dresden, Germany); Florian Niebling (Technische Universitaet Dresden, Germany); Thomas Schlegel (Technische Universitaet Dresden, Germany)
- W10.** “Machine Learning in District Heating System Energy Optimization,”
Samuel O. Idowu (Luleå University of Technology, Sweden); Christer Åhlund (Lulea University of Technology, Sweden); Olov Schelén (Luleå University of Technology, Sweden)
- W11.** “Using Human Brain Signals to Navigate Rat Robots,”
Yipeng Yu (Zhejiang University, P.R. China); Cunle Qian (Zhejiang University, P.R. China); Gang Pan (Zhejiang University, P.R. China); Zhaohui Wu (Zhejiang University, P.R. China)
- W12.** “Citizen-Friendly Participatory Campaign Support,”
Jesse Zaman (Vrije Universiteit Brussel, Belgium); Ellie D’Hondt (Vrije Universiteit Brussel, Belgium); Elisa Gonzalez Boix (Vrije Universiteit Brussel, Belgium); Eline Philips (Vrije Universiteit Brussel, Belgium); Kennedy Kamona (Vrije Universiteit Brussel, Belgium); Wolfgang De Meuter (Vrije Universiteit Brussel, Belgium)

Reception (parallel to Demo/WiP)

Foyer Mithras & Gallery

4:00 pm – 6:00 pm

■ Wednesday, March 26

Keynote Lecture

Hadrianus

8:45 am – 10:00 am

Chair: Károly Farkas (Budapest University of Technology and Economics)

- K2.** “IoT on the Move: The Ultimate Driving Machine as the Ultimate Mobile Thing”
Dr. Christoph Grote (Head of BMW Group Research and Technology, BMW Group, Germany)

Coffee/Tea Break

Foyer

10:00 am – 10:30 am

Session 3 – Best Papers

Hadrianus

10:30 am – 12:00 pm

Chair: George Roussos (Birkbeck College, University of London, UK)

- 3A1.** “Multi-scale Conditional Random Fields for First-Person Activity Recognition,”
Kai Zhan (University of Sydney, Australia); Steven Faux (University of New South Wales, Australia); Fabio Ramos (University of Sydney, Australia)
- 3A2.** “Inferring Occupancy from Opportunistically Available Sensor Data,”
Longqi Yang (Zhejiang University, P.R. China); Kevin Ting (University of California, Los Angeles, USA); Mani B. Srivastava (University of California, Los Angeles, USA)
- 3A3.** “Pushing the Spatio-Temporal Resolution Limit of Urban Air Pollution Maps,”
David Hasenfratz (ETH Zurich, Switzerland); Olga Saukh (ETH Zurich, Switzerland); Christoph Walser (ETH Zurich, Switzerland); Christoph Hueglin (EMPA, Switzerland); Martin Fierz (FHNW, Switzerland); Lothar Thiele (Swiss Federal Institute of Technology Zurich (ETH Zurich), Switzerland)

Lunch

Ambrosia Restaurant

12:00 pm – 1:30 pm

Session 4 – Human Dynamics

Hadrianus

1:30 pm – 2:40 pm

Chair: Daniele Riboni (University of Milan, Italy)

- 4A1.** “From Proximity Sensing to Spatio-Temporal Social Graphs,”
Claudio Martella (VU University Amsterdam, Italy); Matthew Dobson (VU University Amsterdam, The Netherlands); Aart van Halteren (VU University Amsterdam, The Netherlands); Maarten van Steen (VU University Amsterdam, The Netherlands)
- 4A2.** “A Refined Limit on the Predictability of Human Mobility,” (concise)
Gavin Smith (The University of Nottingham, United Kingdom); Romain Wieser (Télécom ParisTech, France); James Goulding (University of Nottingham, United Kingdom); Duncan Barrack (The University of Nottingham, United Kingdom)

- 4A3.** “A Regression-based Radar-Mote System for People Counting” (concise)
Jin He (The Ohio State University, USA); Anish Arora (The Ohio State University, USA)

Coffee/Tea Break

Foyer

2:40 pm – 3:00 pm

Ph.D. Forum on Pervasive Comp. and Comm. – “Teaser Madness”

Hadrianus

3:00pm – 3:10pm

Chair: Daniela Nicklas (Carl von Ossietzky Universität Oldenburg, Germany)

Ph.D. Forum on Pervasive Comp. and Comm. – Posters

Hadrianus

3:10 pm – 4:20 pm

Chair: Daniela Nicklas (Carl von Ossietzky Universität Oldenburg, Germany)

- P1.** “A Lightweight and Low-Power Activity Recognition System for Mini-Wearable Devices,”
Lisha Hu (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China)
- P2.** “Bayesian Nonparametric Extraction of Hidden Contexts from Pervasive Honest Signals,”
Thuong C. Nguyen (Deakin University, Australia)
- P3.** “Fast-Converging Indoor Mapping for Wireless Indoor Localization,”
Zulfazli Hussin (University of Hyogo, Japan)
- P4.** “Participatory Sensing Based Optimization of Environmental Parameters Using the Example of Energy Saving in Residential Environments,”
Frank Englert (TU Darmstadt, Germany)
- P5.** “Design Method for Developing a Mobile Engineering-Application Middleware (MEAM),”
Eva Hoos (University of Stuttgart, Germany)
- P6.** “Social Pervasive Systems: The Harmonization Between Social Networking and Pervasive Systems,”
Soumaia A. Al Ayyat (The American University in Cairo, Egypt)
- P7.** “Physically Informed Assertions for Cyber Physical Systems Development and Debugging,”
Xi Zheng (University of Texas at Austin, USA)
- P8.** “Mobile Collaborative Cloudless Computing, Design Method for Developing a Mobile Engineering-Application Middleware (MEAM),”
Nuno Cruz (Instituto Politecnico de Lisboa, Portugal)

Panel Session – PerCom 2014 Panel

Hadrianus

4:30 pm – 6:00 pm

Moderator: Archan Misra (Singapore Management University)

- PAN.** “Infrastructure vs. Mobile Sensing The Evolving Landscape”
Panelists:
Yutaka Arakawa (Nara Institute of Science and Technology, Japan)
Anish Arora (Ohio State University, USA)
Mani Srivastava (University of California at Los Angeles, USA)
Paul Lukowicz (Technical University of Kaiserslautern & DFKI, Germany)

Conference Banquet

Boat Europa

7:00 pm – 10:00 pm

■ Thursday, March 27

Session 5 – Sensing and Applications

Hadrianus

8:30 am – 10:00 am

Chair: Franca Delmastro (IIT-CNR, Italy)

- 5A1. **“Missing Sensor Value Estimation Method for Participatory Sensing Environment,”**
Hisashi Kurasawa (NTT, Japan); Hiroshi Sato (NTT, Japan); Atsushi Yamamoto (NTT, Japan); Hitoshi Kawasaki (NTT, Japan); Motonori Nakamura (NTT, Japan); Yohei Fujii (NTT, Japan); Hajime Matsumura (NTT, Japan)
- 5A2. **“Capacity Of Pervasive Camera Based Communication Under Perspective Distortion,”**
Ashwin Ashok (Rutgers, The State University of New Jersey, USA); Marco Gruteser (WINLAB / Rutgers University, USA); Narayan Mandayam (WINLAB, Rutgers University, USA); Shubham Jain (WINLAB/Rutgers University, USA); Kristin Dana (Rutgers University, USA); Wenjia Yuan (Rutgers, The State University of New Jersey, USA)
- 5A3. **“Unleashing The Wild Card for Mobile Payment,”**
Mastooreh Salajegheh (University of Virginia, USA); Bodhi Priyantha (Microsoft Research, USA); Jie Liu (Microsoft Research, USA)

Coffee/Tea Break

Foyer

10:00 am – 10:30 am

Session 6 – Indoor Localization

Hadrianus

10:30 am – 12:10 pm

Chair: Gregor Schiele (Digital Enterprise Research Institute, Ireland)

- 6A1. **“Analysis Methods for Extracting Knowledge from Large-Scale WiFi Monitoring to Inform Building Facility Planning,”**
Antonio J. Ruiz-Ruiz (University of Murcia, Spain); Henrik Blunck (Aarhus University, Denmark); Thor Prentow (Aarhus University, Denmark); Allan Stisen (Aarhus University, Denmark); Mikkel Baun Kjærgaard (Aarhus University, Denmark)
- 6A2. **“MapGENIE: Grammar-enhanced Indoor Map Construction from Crowd-sourced Data,”**
Damian Philipp (University of Stuttgart, Germany); Patrick Baier (University of Stuttgart, Germany); Christoph Dibak (University of Stuttgart, Germany); Frank Dürr (University of Stuttgart, Germany); Kurt Rothermel (University of Stuttgart, Germany); Susanne Becker (University of Stuttgart, Germany); Michael Peter (University of Stuttgart, Germany); Dieter Fritsch (University of Stuttgart, Germany)
- 6A3. **“The Telepathic Phone: Frictionless Activity Recognition from WiFi-RSSI,” (concise)**
Stephan Sigg (National Institute of Informatics, Germany); Ulf Blanke (ETH Zürich, Germany); Gerhard Tröster (Wearable Computing Lab ETH Zürich, Switzerland)
- 6A4. **“Incremental Wi-Fi Scanning for Energy-Efficient Localization,” (concise)**
Niels Brouwers (Delft University of Technology, The Netherlands); Marco Zuniga (Delft University of Technology, The Netherlands); Koen Langendoen (Delft University of Technology, The Netherlands)

Lunch*Ambrosia Restaurant***12:10 pm – 1:30 pm****Session 7 – Security***Hadrianus***1:30 pm – 3:00 pm***Chair: Claudio Bettini* (University of Milan, Italy)

- 7A1. **“Comparing and Fusing Different Sensor Modalities for Relay Attack Resistance in Zero-Interaction Authentication,”**
Hien Thi Thu Truong (University of Helsinki, Finland); Xiang Gao (University of Helsinki, Finland); Babins Shrestha (University of Alabama at Birmingham, USA); Nitesh Saxena (University of Alabama at Birmingham, USA); N. Asokan (Aalto University, Finland); Petteri Nurmi (Helsinki Institute for Information Technology HIIT, Finland)
- 7A2. **“Soft Authentication with Low-Cost Signatures,”**
Senaka Buthpitiya (Carnegie Mellon University, USA); Anind Dey (Carnegie Mellon University, USA); Martin Griss (Carnegie Mellon University, USA)
- 7A3. **“Commitment-based device pairing with synchronized drawing,”**
Mohit Sethi (Royal Institute of Technology (KTH), Finland); Markku Antikainen (Aalto University, Finland); Tuomas Aura (Aalto University, Finland)

Coffee/Tea Break*Foyer***3:00 pm – 3:30 pm****Session 8 – Privacy***Hadrianus***3:30 pm – 4:50 pm***Chair: Brent Lagesse* (University of Washington, Bothell, USA)

- 8A1. **“Differentially-Private Release of Check-in Data for Venue Recommendation,”**
Daniele Riboni (University of Milan, Italy); Claudio Bettini (University of Milan, Italy)
- 8A2. **“Privacy, Quality of Information, and Energy Consumption in Participatory Sensing Systems,”**
Idalides Vergara-Laurens (University of South Florida, USA); Diego Mendez (Pontificia Universidad Javeriana, Colombia); Miguel A. Labrador (University of South Florida, USA)
- 8A3. **“Combined Heat and Privacy: Preventing Occupancy Detection from Smart Meters,”** (concise)
Dong Chen (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)

PerCom 2014 Town Hall Meeting*Hadrianus***5:00 pm – 6:00 pm***Chair: Jadwiga Indulska* (The University of Queensland, Australia)

■ Friday, March 28

Post-conference Workshops

Morning coffee break: 10:00 am – 10:30 am » Foyer

Afternoon coffee break: 3:00 pm – 3:30 pm » Foyer

Lunch: 12:00 pm – 1:30 pm » Ambrosia Restaurant

The 6th International Workshop on Information Quality and Quality of Service for Pervasive Computing (IQ2S)

Location: Marcus

Session 1 – Keynote Speech

9:00 am – 10:00 am *Chair:* Prasant Mohapatra (University of California, Davis, USA)

- IQK.** “Community Sense-and-Response Systems: Your Phone as Seismometer”
Andreas Krause (ETH Zurich, Switzerland)

Session 2 – Exploiting and Analyzing Social Networks

10:30 am – 12:00 pm *Chair:* Aylin Yener (Pennsylvania State University, USA)

- IQ1.** “ClariSense: Clarifying Sensor Anomalies using Social Network Feeds,”
Prasanna Giridhar (UIUC, USA); Md Tanvir A Amin (University of Illinois at Urbana-Champaign, USA); Tarek Abdelzaher (University of Illinois, Urbana Champaign, USA); Lance Kaplan (US Army Research Laboratory, USA); Jemin George (Army Research Laboratory, USA); Raghu Ganti (IBM T J Watson Research Center, USA)
- IQ2.** “Impact of Socially Based Demand on the Efficiency of Caching Strategy,”
Buster Holzbauer (Rensselaer Polytechnic Institute, USA); Boleslaw K Szymanski (Rensselaer Polytechnic Institute, USA); Eyuphan Bulut (Cisco Systems, USA)
- IQ3.** “A BSP Approach to Composite Network Analysis,”
Mudhakar Srivatsa (IBM T.J. Watson Research Center, USA); Raghu Ganti (IBM T J Watson Research Center, USA); Steven A. Borbash (US Government, USA); Dakshi Agrawal (IBM Research, USA)

Session 3 – On QoS and QoE

1:30 pm – 3:00 pm *Chair:* Tarek Abdelzaher (UIUC, USA)

- IQ4.** “Developing a QoS-based Tasklet Trading System,”
Janick Edinger (University of Mannheim, Germany); Sebastian VanSyckel (University of Mannheim, Germany); Christian Krupitzer (University of Mannheim, Germany); Justin Mazzola Paluska (MIT, USA); Christian Becker (Universität Mannheim, Germany)
- IQ5.** “On the Limited Potential of Buffers to Improve Quality of Experience,”
Markus Fiedler (Blekinge Institute of Technology, Sweden)

- IQ6.** “Mobile Quality of Experience: Recent Advances and Challenges,”
Vasilios A. Siris (Athens University of Economics and Business / ICS-FORTH, Greece);
Konstantinos Balampekos (Nokia Solutions and Networks, Greece); Mahesh K Marina (The
University of Edinburgh, United Kingdom)

Session 4 – Semantics and Quality

3:30 pm – 5:00 pm *Chair:* Boleslaw K. Szymanski (Rensselaer Polytechnic Institute, USA)

- IQ7.** “Semantic Index Assignment”
Basak Guler (The Pennsylvania State University, USA); Aylin Yener (Pennsylvania State
University, USA)
- IQ8.** “Enriching sensor data processing with quality semantics,”
Christian Michael Kuka (Carl von Ossietzky Universitaet Oldenburg, Germany); Daniela Nicklas
(Carl von Ossietzky Universitaet Oldenburg, Germany)
- IQ9.** “Why is indoor localization still so hard ?,”
Brieuc Viel (Linköping University - RTS Lab, France); Mikael Asplund (Trinity College Dublin,
Sweden)

The 11th IEEE International Workshop on Managing Ubiquitous Communications and Services (MUCS)

Location: Hadrianus B

Session 1 – Keynote Speech

9:00 am – 10:00 am *Chair:* TBA (TBA)

- MUK.** “Software Defined Systems for Management of Ubiquitous Communications and Services
- How and what to virtualise and programme?”
Alex Galis (University College London, UK)

Session 2 – Applications

10:30 am – 12:00 pm *Chair:* TBA (TBA)

- MU1.** “Semantics-Empowered Middleware Implementation for Home Ecosystem Gateway,”
Jasvinder Singh (Nimbus Centre for Embedded System Research, Ireland); Navid Hassanzadeh
(Cork Institute of Technology, Ireland); Susan Rea (Cork Institute of Technology, Ireland); Dirk
Pesch (Cork Institute of Technology, Ireland)
- MU2.** “Sensor Knowledge Representation with SpatioTemporal Annotation: An Energy Sensor
Ontology Use Case,”
Sounak Dey (TCS, India); Ranjan Dasgupta (Tata Consultancy Services Ltd, India)
- MU3.** “A Semantic Workflow Engine Powered by Grid Reasoning,”
Sam Coppens (Ghent University - iMinds, Belgium); Ruben Verborgh (Ghent University
– iMinds, Belgium); Erik Mannens (Ghent University, Belgium); Rik Van de Walle (Ghent
University - IBBT, Belgium)

Session 3 – Context Based Systems

1:30 pm – 2:30 pm

Chair: Dirk Pesch (Cork Institute of Technology, Ireland)

MU4. “Multi-User Context Inference Based on Neural Networks,”

Ioannis Papaioannou (National Technical University of Athens, Greece); Nick Kalatzis (National Technical University of Athens, Greece); Ioanna Roussaki (National Technical University of Athens, Greece); Nicolas Liampotis (National Technical University of Athens, Greece); Pavlos Kosmidis (National Technical University of Athens, Greece)

MU5. “Context-aware Heterogeneous Network Performance Analysis: Test-bed Development,”

Zhenhui Yuan (Dublin City University, Ireland); John Keeney (Ericsson, Ireland); Sven van der Meer (Ericsson LM, Ireland); Gabriel Hogan (Dublin City University, Ireland); Gabriel-Miro Muntean (Dublin City University, Ireland)

Session 4 – Social Networks

3:30 pm – 4:30 pm

Chair: Sajal K. Das (Missouri University of Science and Technology, USA)

MU6. “Trustworthy Service Discovery for Mobile Social Network in Proximity,”

Chii Chang (Monash University, Australia); Satish N Srirama (University of Tartu, Estonia); Sea Ling (Monash University, Australia)

MU7. “Personalizing System Behaviour in a Pervasive Social Networking System,”

Elizabeth Papadopoulou (Heriot-Watt University, United Kingdom); Sarah Gallacher (University College London, United Kingdom); Nick K Taylor (Heriot-Watt University, United Kingdom); Howard Williams (Heriot-Watt University, United Kingdom)

Session 5 – Panel

4:30 pm – 5:30 pm

Chair: TBA (TBA)

The 1st Workshop on Developing Applications for Pervasive Display Networks (PD-Apps)

Location: Galenus

Welcome from the Organizers

9:00 am – 9:15 am

Chair: Nemanja Memarovic (University of Lugano, CH)

Session 1 – Paper Presentations

9:15 am – 10:00 am

Chair: Sarah Clinch (Lancaster University, UK)

PA1. “Social Object Labels,”

Marcus Winter (University of Brighton, United Kingdom)

- PA2.** “Integrating Interactive Applications with Digital Signage: Towards a Scheduling Framework for Pervasive Displays,”
Ivan Elhart (University of Lugano (USI), Switzerland); Marc Langheinrich (University of Lugano (USI), Switzerland); Nemanja Memarovic (University of Lugano (USI), Switzerland)
- PA3.** “Understanding the Use of Web Technologies for Applications in Open Display Networks,”
Constantin Taivan (University of Minho, Portugal); Rui Jose (University of Minho, Portugal); Bruno Silva (Universidade do Minho, Portugal)

Session 2 – Paper Presentations (Continued)

10:30 am – 11:30 pm *Chair: Ivan Elhart (University of Lugano, CH)*

- PA4.** “MoCHA: Augmenting Pervasive Displays through Mobile Devices and Web-based Technologies,”
Elena Oat (Aalto University, Finland); Mario Di Francesco (Aalto University, Finland); Tuomas Aura (Aalto University, Finland)
- PA5.** “UbiBroker: Event-based Communication Architecture for Pervasive Display Networks,”
Tommi Heikkinen (University of Oulu, Finland); Petri Luojus (University of Oulu, Finland); Timo Ojala (University of Oulu, Finland)
- PA6.** “UniDisplay - A Research Prototype to Investigate Expectations Towards Public Display Applications,”
Florian Alt (University of Munich, Germany); Nemanja Memarovic (University of Lugano (USI), Switzerland); Miriam Greis (University of Stuttgart, Germany); Niels Henze (University of Stuttgart, Germany)
- PA7.** “Light-Keypad, Interaction through Coated Double Glazing,”
Lei Ye (University of Nottingham, United Kingdom); Holger Martin Schnädelbach (University of Nottingham, United Kingdom); Steve North (University of Nottingham, United Kingdom)

Session 3 – Identification of Potential Applications to be Designed/Developed

11:30 am – 12:00 pm *Chair: Nemanja Memarovic (University of Lugano, CH)*

Session 4 – Application Design in Group

1:30 pm – 3:00 pm *Chair: Nigel Davies (Lancaster University, UK)*

Session 5 – Application Design in Group (Continued)

3:30 pm – 4:30 pm *Chair: Rui José (University of Minho, PT)*

Session 6 – Plenary Session: Discussion, Consolidation, Action Plan

4:30 pm – 5:30 pm *Chairs: Nigel Davies (Lancaster University, UK), Rui José (University of Minho, PT), Nemanja Memarovic (University of Lugano, CH), Ivan Elhart (University of Lugano, CH), Sarah Clinch (Lancaster University, UK)*

Session 1 – Keynote Speech

9:00 am – 10:00 am *Chair: Thomas Springer* (Technische Universität Dresden, Germany)

- PCK.** “Virtual co-location: As if being there?”
Stephan Lukosch (Delft University of Technology, The Netherlands)

Session 2 – Social Networks and Crowdsensing

10:30 am – 12:00 pm *Chair: Markus Endler* (PUC-Rio, Brazil)

- PC1.** “WiFi Authentication through Social Networks - a Decentralized and Context-aware Approach,”
Yunus Durmus (Delft University of Technology, The Netherlands), Koen Langendoen (Delft University of Technology, The Netherlands)
- PC2.** “Distributed protocols for Ego Betweenness Centrality computation in DOSNs,”
Barbara Guidi (University of Pisa, Italy), Marco Conti (IIT-CNR, Italy), Andrea Passarella (IIT-CNR, Italy), Laura Ricci (University of Pisa, Italy)
- PC3.** “FlySensing: A Case for Crowdsensing in the Air,”
Osarieme Omokaro (The University of North Carolina at Charlotte, USA), Jamie Payton (University of North Carolina at Charlotte, USA)

Session 3 – Mobile Collaboration

1:30 pm – 3:00 pm *Chair: Daniel Schuster* (Technische Universität Dresden, Germany)

- PC4.** “Towards Efficient Group Management and Communication for Large-Scale Mobile Applications,”
Rafael Oliveira Vasconcelos (PUC-Rio, Brazil), Lincoln David (PUC-Rio, Brazil), Markus Endler (PUC-Rio, Brazil)
- PC5.** “Direct Migrator: eliminating borders between Personal Mobile Devices and Pervasive Displays,”
Huiliang Jin (Ecole Centrale de Lyon, France), Tao Xu (Ecole Centrale de Lyon, France), Bertrand David (Ecole Centrale de Lyon, France), René Chalon (Ecole Centrale de Lyon, France)

Welcome from the Organizers

8:45 am – 9:00 am *Chair: Guo Bin* (Northwestern Polytechnical University, P.R. China)

Session 1 – Social and Community Intelligence

9:00 am – 10:00 am *Chair: Guo Bin* (Northwestern Polytechnical University, P.R. China)

- SC1.** “Supervised-Learning Link Recommendation in the DBLP co-authoring network,”
Jose Rodrigues, Jr (University of Sao Paulo, Brazil); Gabriel Gimenes (University of Sao Paulo, Brazil); Hugo Gualdrón (University of Sao Paulo, Brazil); Thiago Raddo (University of Sao Paulo, Brazil)
- SC2.** “The Quest for User Similarity in Mobile Societies,”
Mai ElSherief (Nile University, Egypt); Tamer ElBatt (Faculty of Engineering, Cairo University, Egypt); Ahmed Zahran (Nile University, Egypt); Ahmed Helmy (University of Florida, USA)
- SC3.** “Visualization of Wireless Sensor Networks using Zigbee’s Received Signal Strength Indicator (RSSI) for Indoor Localization and Tracking,”
Flora D Salim (RMIT University, Australia); Mani Williams (RMIT University, Australia); Yury Petrov (RMIT University, Australia); Nishant Sony (RMIT University, Australia); Abdelsalam Saad (RMIT University, Australia); Mars Pena (RMIT University, Australia); Bo Wu (RMIT University, Australia)

Session 2 – Mobile Crowd Sensing

10:30 am – 12:00 pm *Chair: Daqing Zhang* (Institut Télécom, Télécom SudParis, France)

- SC4.** “Expectation-based spatio-temporal clusters formed during opportunistic sensing,”
Matthew Orlinski (Fraunhofer IAIS, Germany); Nicholas Paul Filer (University of Manchester, United Kingdom)
- SC5.** “Earthquake emergency management by Social Sensing,”
Marco Avvenuti (University of Pisa, Italy); Stefano Cresci (CNR, Istituto di Informatica e Telematica, Italy); Mariantonietta Noemi La Polla (Istituto di Informatica e Telematica, Consiglio Nazionale delle Ricerche, Italy); Andrea Marchetti (IIT-CNR, Italy); Maurizio Tesconi (IIT - National Research Council, Italy)
- SC6.** “From Participatory Sensing to Mobile Crowd Sensing,”
Guo Bin (Northwestern Polytechnical University, P.R. China); Zhiwen Yu (Northwestern Polytechnical University, P.R. China); Daqing Zhang (Institut Télécom, Télécom SudParis, France); Xingshe Zhou (Northwestern Polytechnical University, P.R. China)
- SC7.** “D2SC: Data-Driven Smarter Cities,”
Chao Chen (Institut TELECOM & Management SudParis, France); Daqing Zhang (Institut Télécom, Télécom SudParis, France); Guo Bin (Northwestern Polytechnical University, P.R. China)

Opening Remarks

8:45 am – 9:00 am *Chair: Thorsten Strufe* (TU Darmstadt, Germany)

Session 1 – Attacks on Online Social Networks

9:00 am – 10:00 am *Chair: Thorsten Strufe* (TU Darmstadt, Germany)

- SS1.** “Susceptibility to URL-based Internet Attacks: Facebook vs. Email”,
Zinaida Benenson (University of Erlangen-Nuremberg, Germany); Anna Girard (University of Erlangen-Nuremberg, Germany); Nadina Hintz (University of Erlangen-Nuremberg, Germany); Andreas Luder (University of Erlangen-Nuremberg, Germany)
- SS2.** “Measuring Importance of Seeding for Structural De-anonymization Attacks in Social Networks”,
Gabor Gulyas (Budapest University of Technology and Economics, Hungary); Sándor Imre (Technical University of Budapest, Hungary)

Session 2 – Defensive Solutions for Online Social Networks

10:30 am – 12:00 pm *Chair: Melek Önen* (EURECOM, France)

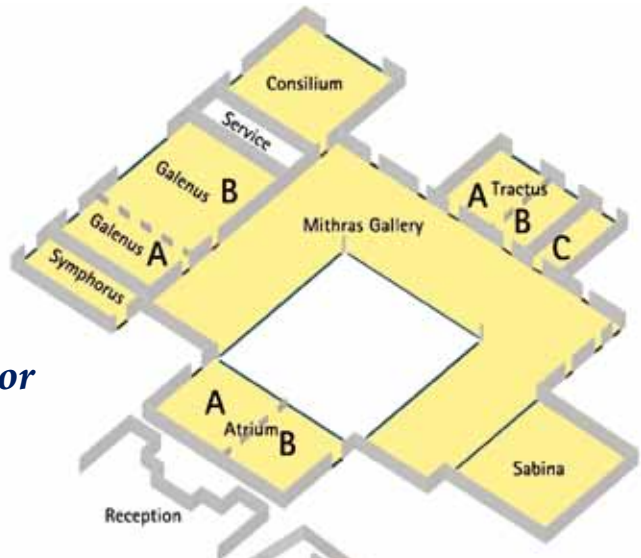
- SS3.** “Collaborative Joint Content Sharing for Online Social Networks”,
Filipe Beato (ESAT/COSIC - KU Leuven, Belgium); Roel Peeters (ESAT/COSIC - KU Leuven, Belgium)
- SS4.** “Access Control in Decentralized Online Social Networks: Applying a Policy-Hiding Cryptographic Scheme and Evaluating Its Performance”,
Oleksandr Bodriagov (KTH Royal Institute of Technology, Sweden); Gunnar Kreitz (KTH - Royal Institute of Technology, Sweden); Sonja Buchegger (KTH, Sweden)
- SS5.** “Personal DLP for Facebook”,
Martin Stopczynski (Technische Universität Darmstadt, Germany); Marco Ghiglieri (Technische Universität Darmstadt, Germany); Michael Waidner (TU Darmstadt, Germany)

■ *My Notes*

■ *My Notes*



■ *Ground Floor*



■ *Level -1*

