2012 IEEE International Conference on Pervasive Computing and **Communications Workshops**

(PERCOM Workshops 2012)

Lugano, Switzerland 19-23 March 2012



IEEE Catalog Number: CFP12344-PRT **ISBN:**

978-1-4673-0905-9

IQ2S 2012: The 4th International Workshop on Information Quality 2012 - Program

S1: Morning Keynote Talk

Keynote: OpenSense: Open Sensor Networks for Air Quality Monitoring Karl Aberer (EPFL, Switzerland)

S2: Network Quality of Information

Quality of Information Functions for Networked Applications

Ahmed Bahjat (Penn State University & King Fahd University of Petroleum and Minerals, USA); Yurong Jiang (University of Southern California, USA); Trevor J. Cook (Army Research Lab, USA); Tom La Porta (Penn State University, USA) pp. 2-7

Maximizing Credibility-based Network Utility via Power Allocation Ertugrul Necdet Ciftcioglu (Pennsylvania State University, USA); Aylin Yener (Pennsylvania State University, USA) pp. 8-13

Transient Traffic Congestion Control with Traveling Auctions Syed Yousaf Shah (Rensselaer Polytechnic Institute, USA); Boleslaw K Szymanski (Rensselaer Polytechnic Institute, USA) pp. 14-19

Distributed Graph Query Processing in Dynamic Networks Mudhakar Srivatsa (IBM T.J. Watson Research Center, USA); Vikas Kawadia (BBN Technologies, USA); Shengqi Yang (Univ of California, Santa Barbara, USA) pp. 20-25

S3: Sensor Networks and Pervasive Environments

The Bus goes Wireless: Routing-Free Data Collection with QoS Guarantees in Sensor Networks

Federico Ferrari (ETH Zurich, Switzerland); Marco Zimmerling (ETH Zurich, Switzerland); Lothar Thiele (ETH Zurich, Switzerland); Luca Mottola (Swedish Institute of Computer Science (SICS), Sweden) pp. 26-31

Energy-Balanced Sensor Selection for Social Context Detection

Viet Nguyen (University of Oslo, Norway); Ellen Munthe-Kaas (University of Oslo, Norway); Thomas Plagemann (University of Oslo, Norway) pp. 32-37

Quality-of-Information Aware Data Collection for Mobile Sensor Networks Edith C.-H. Ngai (Uppsala University & Division of Computer Systems, Sweden); Per Gunningberg (Uppsala University, Sweden) pp. 38-43

Trust and Obfuscation Principles for Quality of Information in Emerging Pervasive Environments

Chatschik Bisdikian (IBM Research, USA); Murat Sensoy (University of Aberdeen, United Kingdom); Timothy J Norman (University of Aberdeen, United Kingdom); Mani B. Srivastava (University of California, Los Angeles, USA) pp. 44-49

S4: Afternoon Keynote Talk

Keynote: Are we Ready to Go Large-Scale? Challenges in the Deployment and Maintenance of Heterogeneous Networks of Cooperating Objects

Pedro Jose Marrón (University of Duisburg-Essen and Fraunhofer FKIE, Germany)

pg. 50

S5: Information Processing

Information Processing and Quality Evaluations

Trevor J. Cook (Army Research Lab, USA); Andrew Toth (US Army Research Laboratory, USA) pp. 51-57

Preserving Quality of Information by using Semantic Relationships

Prithwish Basu (BBN Technologies, USA); Jie Bao (Samsung, USA); Mike Dean (BBN Technologies, USA); James A. Hendler (Rensselaer Polytechnic Institute, USA) pp. 58-63

Session 6: Wrap-up

MUCS 2012: 9th IEEE International Workshop on Managing Ubiquitous Communications and Services 2012 - Program

M1: MUCS Managing Ubiqitous Services and Policies

Capturing and Sharing Human Digital Memories with the Aid of Ubiquitous Peer-to-Peer Mobile Services

Chelsea Dobbins (Liverpool John Moores University, United Kingdom); Madjid Merabti (Liverpool John Moores University, United Kingdom); Paul Fergus (Liverpool John Moores University, United Kingdom); David Llewellyn-Jones (Liverpool John Moores University, United Kingdom) pp. 64-69

Privacy Policies Change Management for Smartphones

Debmalya Biswas (Nokia Research, Switzerland) pp. 70-75

Context Directory: A Context-Aware Service for Mobile Context-Aware Computing Applications by the Example of Google Android

Ralph Löwe (Munich University of Applied Sciences, Germany); Peter Mandl (Munich University of Applied Sciences, Germany); Michael Weber (University of Ulm & Faculty of Engineering and Computer Science, Germany) pp. 76 81

pp. 76-81

M2: MUCS Managing Smart Environments

Towards a Framework to Support Novice Users in Understanding and Monitoring of Home Area Networks

Yuqian Song (Trinity College Dublin, Ireland); Rob Brennan (Trinity College Dublin, Ireland); Dave Lewis (Trinity College Dublin, Ireland); Owen Conlan (Trinity College Dublin, Ireland) pp. 82-87

Is There Meta-level in Smart Spaces?

Ekaterina Gilman (University of Oulu, Finland); Jukka Riekki (University of Oulu, Finland) pp. 88-93

Data Management in Home Scenarios Using an Autonomic Ontology-Based Approach

Nelia Lasierra (University of Zaragoza, Spain); Alvaro Alesanco (University of Zaragoza, Spain); José García (University of Zaragoza, Spain); Declan O'Sullivan (Trinity College Dublin, Ireland) pp. 94-99

A Context-Aware Publish-Subscribe Middleware for Distributed Smart Environments

Sebastian Bader (University of Rostock, Germany); Martin Nyolt (University of Rostock, Germany)

pp. 100-104

Mk: MUCS Keynote

Keynote: Pervasive Computing vs. Cyber-Physical Systems: A Perspective from Smart Environments

Sajal K. Das (University of Texas at Arlington, USA) pg. 105

M3: MUCS Managing Wireless Sensors

M4: MUCS Position Papers and Work in Progress

*i*Chameleon: A Unified Web Service Framework for Integrating Multimodal Interaction Devices*

Kenneth Wai Kwan Lo (Hong Kong Polytechnic University, Hong Kong); Will Wai Wa Tang (Hong Kong Polytechnic University, Hong Kong); Hong Va Leong (Hong Kong Polytechnic University, Hong Kong); Alvin T.S. Chan (Hong Kong Polytechnic University, Hong Kong); Stephen Chan (Hong Kong Polytechnic University, Hong Kong); Grace Ngai (Hong Kong Polytechnic University, Hong Kong) pp. 106-111

A Framework for Measuring Security of Services in Ubiquitous Computing Environments

Michael Kennedy (Liverpool John Moores University, United Kingdom); David Llewellyn-Jones (Liverpool John Moores University, United Kingdom); Qi Shi (Liverpool John Moores University, United Kingdom); Madjid Merabti (Liverpool John Moores University, United Kingdom) pp. 112-117

Pervasive CSCW for Smart Spaces Communities

Christopher V Lima (University of Aveiro & Instituto de Telecomunicações, Portugal); Diogo Gomes (Universidade de Aveiro & Instituto de Telecomunicações, Portugal); Rui L Aguiar (University of Aveiro & Instituto de Telecomunicações, Portugal) pp. 118-123

Towards Secure and At-Runtime Tailorable Customer-Driven Public Cloud Deployment

Fatih Karatas (University of Siegen, Germany); Mohamed Bourimi (Germany & University of Siegen, Germany); Thomas Barth (University of Siegen, Germany); Dogan Kesdogan (University of Siegen, Germany); Rafael Giménez (Barcelona Digital Technology Centre, Spain); Widura Schwittek (University of Duisburg-Essen, Germany); Marc Planagumà (Barcelona Digital Technology Centre, Spain) pp. 124-130

PerCol 2012: Workshop on Pervasive Collaboration and Social Networking - Program

S1: Pervasive Social Information Diffusion

Context-Aware Communities and Their Impact on Information Influence in Mobile Social Networks

Na Yu (Colorado School of Mines, USA); Qi Han (Colorado School of Mines, USA)

pp. 131-136

Design and Implementation of a Socially-Enhanced Pervasive Middleware Gabriella Castelli (University of Modena and Reggio Emilia, Italy); Alberto Rosi (University of Modena and Reggio Emilia, Italy); Franco Zambonelli (University of Modena and Reggio Emilia, Italy) pp. 137-142

S2: Pervasive Social Networks

Understanding the Privacy Implications of Using Context-based Awareness Cues in Social Networks

Ville Antila (VTT Technical Research Centre of Finland, Finland); Jussi Polet (VTT Technical Research Centre of Finland, Finland) pp. 143-148

Spreading Influence Values over Weighted Relationships among Users of Several Social Networks

Yolanda Blanco-Fernández (University of Vigo, Spain); Martin Lopez-Nores (University of Vigo, Spain); Jose Juan Pazos-Arias (Universidad de Vigo, Spain); Manuela I Martín-Vicente (University of Vigo, Spain) pp. 149-154

S3: Pervasive Interaction in Public Places

Step by Step vs. Catch Me If You Can - On The Benefit of Rounds in Locationbased Games

Daniel Schuster (Technische Universität Dresden, Germany); Danny Kiefner (TU Dresden, Germany); Robert Lübke (Dresden University of Technology, Germany); Thomas Springer (Technische Universität Dresden, Germany); Pascal Bihler (University of Bonn, Germany); Holger Mügge (University of Bonn, Germany) pp. 155-160

Influencing the Experience of People in Urban Public Places through Mobile Mediated Interactions

Jan Seeburger (Queensland University of Technology, Australia) pp. 161-165

S4: Pervasive Collaboration

WatchMyPhone - Providing Developer Support for Shared User Interface Objects in Collaborative Mobile Applications

Sven Bendel (Dresden University of Technology, Germany); Daniel Schuster (Technische Universität Dresden, Germany) pp. 166-171

PerHot 2012: The 1st International IEEE Workshop on Hot Topics in Pervasive Computing - Program

Keynote: PerHot Keynote

Keynote: The Operating System for the Computer of the 21st Century Christian Becker (Universität Mannheim, Germany) pg. 172

S1: The Future of Pervasive Computing

New directions for system support in Pervasive Computing

Helena Rodrigues (Universidade do Minho, Portugal); Rui Jose (University of Minho, Portugal); Arlindo Santos (University of Minho, Portugal); Bruno Silva (Universidade do Minho, Portugal) pp. 173-178

A Spatiotemporal Model for Ephemeral Data in Pervasive Computing Networks Jonas Michel (University of Texas at Austin, USA); Christine Julien (The University of Texas at Austin, USA); Jamie Payton (University of North Carolina at Charlotte, USA); Gruia-Catalin Roman (University of New Mexico, USA) pp. 179-184

Self-Adaptive Mechanism for Disaggregated Computing Ichiro Satoh (National Institute of Informatics, Japan) pp. 185-190

S2: Pervasive Civilizations

New Instruments of Governance for our Societies

Alexander Gluhak (The University of Surrey, United Kingdom); Rob Van Kranenburg (Council, Thinktank for IoT & University of Liepaja, Belgium) pp. 191-196

Transforming Traditional Pervasive Computing for Emerging Markets -Underlying Challenges and Opportunities

Puneet Kaur (Aalto University, Finland); Amandeep Dhir (Aalto University, Finland); Ibrahim Albidewi (King Abdulaziz University, Saudi Arabia); Daniyal M Alghazzawi (King Abdulaziz University, Saudi Arabia) pp. 197-202

PerMoby 2012: International Workshop on the Impact of Human Mobility in Pervasive Systems and Applications 2012 - Program

K: Keynote

Keynote: Mobility in Socio-Technical Urban Organisms: from Sensing to Steering

Franco Zambonelli (University of Modena and Reggio Emilia, Italy) pg. 203

S1: Opportunistic Communication and Human Mobility

Mobility and Service Discovery in Opportunistic Networks

Mikko Pitkänen (Aalto University, Finland); Teemu Kärkkäinen (Helsinki University of Technology, Finland); Joerg Ott (Aalto University & Helsinki Institute of Information Technology, Finland) pp. 204-210

Lobby Influence: Opportunistic forwarding algorithm based on Human social relationship patterns

Sardar Kashif Ashraf Khan (Mirpur University of Science and Technology, United Kingdom); Raul Mondragon (Queen Mary University of London, United Kingdom); Laurissa Tokarchuk (Queen Mary, University of London, United Kingdom)

рр. 211-216

You are where you eat: Foursquare checkins as indicators of human mobility and behaviour

Gualtiero Colombo (University of Cardiff, United Kingdom); Martin J Chorley (Cardiff University, United Kingdom); Matthew Williams (Cardiff University, United Kingdom); Stuart Allen (University of Cardiff, United Kingdom); Roger Whitaker (University of Cardiff, United Kingdom) pp. 217-222

S2: Making Sense of Human Activity

People Get Together on Special Events: discovering happenings in the city via cell network analysis

Laura Ferrari (University of Modena and Reggio Emilia, Italy); Marco Mamei (Università di Modena e Reggio Emilia, Italy); Massimo Colonna (Telecom Italia, Italy) pp. 223-228

Practical Automated Activity Recognition Using Standard Smartphones Victoria Stewart (Queen's University of Belfast, United Kingdom); Robin Ferguson (The Queen's University of Belfast, United Kingdom); Jian-Xun Peng (Queen's University of Belfast, United Kingdom); Karen Rafferty (Queen's University Belfast, United Kingdom) pp. 229-234

A Method of Simultaneously Displaying a Passing Person and His/Her Message on the Same Screen Space

Kazumasa Takami (Soka University, Japan) pp. 235-240

S3: Localization

Enhanced Localization Solution

Michela Papandrea (University of Applied Sciences of Southern Switzerland Switzerland (SUPSI), Switzerland); Silvia Giordano (University of Applied Sciences and Arts of Southern Switzerland (SUPSI), Switzerland) pp. 241-246

MCMC-based indoor localization with a smart phone and sparse WiFi access points

Yan Liu (Harbin Institute of Technology, P.R. China); Qiang Wang (Harbin Institute of Technology, P.R. China); Junbin Liu (Queensland University of Technology & Commonwealth Scientific and Industrial Organisation, Australia); Tim Wark (CSIRO, Australia) pp. 247-252

Comm2Sense: Detecting Proximity Through Smartphones

Iacopo Carreras (Create-Net, Italy); Aleksandar Matic (Create-net, Italy); Piret Saar (CREATE-NET, Italy); Venet Osmani (Create-Net, Italy) pp. 253-258

Situation-Aware Choice of the Most Accurate Positioning System

Daniel Schön (University of Mannheim, Germany); Hendrik Lemelson (University of Mannheim, Germany); Wolfgang Effelsberg (University of Mannheim, Germany) pp. 259-264

PerSeNS 2012: 8th IEEE International Workshop on Sensor Networks and Systems for Pervasive Computing 2012 -Program

Keynote Speech

Keynote: Of Towers, Tunnels, Animals, and Wireless Sensor Networks: From Research to the Real World—and Back

Gian Pietro Picco (University of Trento, Italy) pg. 265

S1: Networking Protocols

Route Selection for Mobile Sensors with Checkpointing Constraints Olga Saukh (ETH Zurich, Switzerland); David Hasenfratz (ETH Zürich, Switzerland); Abouzar Noori (ETH Zurich, Switzerland); Tamara Ulrich (ETH Zurich, Switzerland); Lothar Thiele (ETH Zurich, Switzerland) pp. 266-271

Stateless Multicast Forwarding with RPL in 6LowPAN Sensor Networks George Oikonomou (University of Bristol, United Kingdom); Iain Phillips (Loughborough University, United Kingdom) pp. 272-277

DCCC6: Duty Cycle-Aware Congestion Control for 6LoWPAN Networks Vasilis Michopoulos (Loughborough University, United Kingdom); Lin Guan (Loughborough University, United Kingdom); George Oikonomou (University of Bristol, United Kingdom); Iain Phillips (Loughborough University, United Kingdom) pp. 278-283

S2: Security and QoS

Improving Internet of Things Communications through Compression and Classification

Matteo Danieletto (University of Padova, Italy); Nicola Bui (University of Padova & Patavina Technologies, Italy); Michele Zorzi (Università degli Studi di Padova, Italy) pp. 284-289

pp. 204-209

CSI: Compressed Sensing-Based Clone Identification in Sensor Networks

Chia-Mu Yu (Academia Sinica and Natioanl Taiwan University, Taiwan); Chun-Shien Lu (Institute of Information Science, Academia Sinica, Taiwan); Sy-Yen Kuo (National Taiwan University, Taiwan) pp. 290-295 Simulation Study on Code Attestation with Compressed Instruction Code Benjamin Vetter (Hamburg University of Applied Science, Germany); Dirk Westhoff (HAW Hamburg, Germany) pp. 296-301

S3: Sensor-based systems and applications

Performance of Wireless Sensor Topologies Inspired by E. coli Genetic Networks

Bhanu Kamapantula (Virginia Commonwealth University, USA); Ahmed Abdelzaher (Work Colleague, USA); Preetam Ghosh (Virginia Commonwealth University, USA); Michael Mayo (ERDC, US Army, USA); Edward Perkins (ERDC, US Army, USA); Sajal K. Das (University of Texas at Arlington, USA) pp. 302-307

Swarm-based Approach to Evaluate Fuzzy Classification of Semantic Sensor Data

Vincenzo Loia (University of Salerno, Italy); Giuseppe Fenza (University of Salerno, Italy); Domenico Furno (University of Salerno, Italy); Carmen De Maio (Consorzio Ricerca Sistemi ad Agenti, Italy) pp. 308-313

Policies for Predictive Energy Management with Supercapacitors

Christian Renner (Hamburg University of Technology, Germany); Florian Meier (Hamburg University of Technology, Germany); Volker Turau (Hamburg University of Technology, Germany) pp. 314-319

From Business Process Models to Pervasive Applications: Synchronization and Optimization

Alexandru Caracas (IBM Research - Zurich, Switzerland) pp. 320-325

Panel: Sensor networks: a general purpose or an application driven technology?

SESOC 2012: Fourth International Workshop on SECurity and SOCial Networking - Program

Session 1: Decentralized social networks

DECENT: A Decentralized Architecture for Enforcing Privacy in Online Social Networks

Sonia Jahid (University of Illinois at Urbana-Champaign, USA); Shirin Nilizadeh (Indiana University at Bloomington, USA); Prateek Mittal (University of Illinois at Urbana-Champaign, USA); Nikita Borisov (University of Illinois, Urbana Champaign, USA); Apu Kapadia (Indiana University & Indiana University Bloomington, USA) pp. 326-332

The Devil is in the Metadata - New Privacy Challenges in Decentralised Online Social Networks

Benjamin Greschbach (KTH Royal Institute of Technology, Sweden); Gunnar Kreitz (KTH - Royal Institute of Technology, Sweden); Sonja Buchegger (KTH, Sweden)

pp. 333-339

Session 2: Privacy control and settings in OSNs

A Study of Privacy Settings Errors in an Online Social Network Michelle Madejski (Columbia University, USA); Maritza Johnson (Columbia University, USA); Steven M Bellovin (Columbia University, USA) pp. 340-345

Facebook Users Have Become Much More Private: A Large-Scale Study Ratan Dey (Polytechnic Institute of New York University, USA); Zubin Jelveh (Polytechnic Institute of New York University, USA); Keith W. Ross (Polytechnic Institute of NYU, USA) pp. 346-352

Detecting Social Cliques for Automated Privacy Control in Online Social Networks

Hakan Yıldız (University of California, Santa Barbara, USA); Christopher Kruegel (University of California, Santa Barbara, USA) pp. 353-359

Session3 - Keynote Speech

Keynote: Google and Privacy

Cyrill Osterwalder (Google, Switzerland) pg. 360

Session 4: Attacks, Information Leakage and Location Privacy

A Machine Learning Based Approach for Predicting Undisclosed Attributes in Social Networks

Gergely Kótyuk (Budapest University of Technology and Economics, Hungary); Levente Buttyan (Budapest University of Technology and Economics, Hungary) pp. 361-366

Your Facebook Deactivated Friend or a Cloaked Spy

Shah Mahmood (University College London, United Kingdom); Yvo Desmedt (UCL, United Kingdom)

pp. 367-373

A leaky Bucket called Smartphone

Osman Ugus (Hamburg University of Applied Science, Germany); Dirk Westhoff (HAW Hamburg, Germany); Hariharan Rajasekaran (AGT (R&D) GmbH, Germany) pp. 374-380

Location Privacy via Actively Secure Private Proximity Testing

Janus Dam Nielsen (Alexandra Institute, Denmark); Jakob Illeborg Pagter (Alexandra Institute's Centre for IT Security (AICIS), Denmark); Michael Stausholm (Alexandra Institute, Denmark) pp. 381-386

WIP of PerCom 2012: Work in Progress session at PerCom 2012 - Program

Work in Progress

Evaluation of Tooth-touch Sound and Expiration Based Mouse Device for Disabled Persons

Koichi Kuzume (Yuge National College of Maritime Technology, Japan) pp. 387-390

Smart Classroom: Real-Time Feedback on Lecture Quality

Nenad Gligorić (Faculty of Organizational Sciences, Serbia); Ana Uzelac (Faculty of Transport and Traffic Engineering, Serbia); Srdjan Krco (University of Belgrade, Faculty of Organizational Sciences & Ericsson Serbia, Serbia) pp. 391-394

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); Florian Lettner (University of Applied Sciences Upper Austria, Austria) pp. 395-398

RoutineMaker: Towards End-User Automation of Daily Routines Using Smartphones

Ville Antila (VTT Technical Research Centre of Finland, Finland); Jussi Polet (VTT Technical Research Centre of Finland, Finland); Arttu Lämsä (VTT Technical Research Centre of Finland, Finland); Jussi Liikka (VTT Technical Research Centre of Finland, Finland) pp. 399-402

Sustainable Architecture and Human Comfort through Adaptive Distributed Systems

Zoltan Nagy (ETH Zurich, Switzerland); Dino Rossi (ETH Zurich, Switzerland); Arno Schlueter (ETH Zurich, Switzerland) pp. 403-406

Towards Context Adaptive Privacy Decisions in Ubiquitous Computing

Florian Schaub (Ulm University, Germany); Bastian Könings (Ulm University, Germany); Michael Weber (University of Ulm & Faculty of Engineering and Computer Science, Germany); Frank Kargl (Ulm University & University of Twente, Germany)

pp. 407-410

Public WiFi Hotspots at Your Service

Geert Vanderhulst (Alcatel-Lucent Bell Labs, Belgium); Lieven Trappeniers (Alcatel-Lucent, France) pp. 411-414

Towards an On-Site Characterization of Energy Harvesting Devices for Wireless Sensor Networks

Leander B Hörmann (Graz University of Technology, Austria); Philipp M Glatz (Delft University of Technology, The Netherlands); Karima B. Hein (Graz University of Technology, Austria); Michael Steinberger (TU Graz, Austria); Christian Steger (Graz University of Technology, Austria); Reinhold Weiss (Graz University of Technology, Austria) pp. 415-418

QoS Characteristics on a Longcut Route with Various Radio Resource Models

Kenji Kanai (Waseda University, Japan); Yuri Akamatsu (Waseda University, Japan); Jiro Katto (Waseda University, Japan); Tutomu Murase (NEC Corporation, Japan) pp. 419-422

Can Smartphones Detect Stress-related Changes in the Behaviour of Individuals?

Gerald Bauer (University of Passau, Germany); Paul Lukowicz (University of Passau, Germany) pp. 423-426

Interacting Places - a Framework for Promoting Community Interaction and Place Awareness through Public Displays

Nemanja Memarovic (University of Lugano (USI), Switzerland); Marc Langheinrich (University of Lugano (USI), Switzerland); Florian Alt (University of Stuttgart, Germany) pp. 427-430

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) pp. 431-434

Middleware for distributed collaborative ad-hoc environments

Oliver Schmid (University of Fribourg, Switzerland); Béat Hirsbrunner (University of Fribourg, Switzerland) pp. 435-438

Sensing the Sensor Web

Jie Wan (CLARITY Centre for Sensor Web Technologies, University College Dublin, Ireland); Michael O'Grady (University College Dublin, Ireland); Gregory O'Hare (University College Dublin, Ireland) pp. 439-442

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 (University of Science and Technology Beijing, P.R. China); Sibel Pamukcu (Lehigh University, USA); Muhannad Suleiman (Lehigh University, USA) pp. 443-446

(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)

pp. 447-450

Enhancing Location Privacy in Mobile IPv6 by using Redundant Home Agents

Hiroyuki Takahashi (Takushoku University, Japan); Takashi Minohara (Takushoku University, Japan) _{pp. 451-454}

Unify to Bridge Gaps: Bringing XMPP into the Internet of Things

Michael Kirsche (Brandenburg University of Technology Cottbus, Germany); Ronny Klauck (Brandenburg University of Technology Cottbus, Germany) pp. 455-458

WalkieTagging: Efficient Video Annotation Method based on Spoken Words for Smart Devices

YoungTae Seok (Korean Advanced Institute for Science and Technology, Korea); Howon Lee (Hankyong National University, Korea) pp. 459-462

Occupancy Detection in Commercial Buildings using Opportunistic Context Sources

Sunil K Ghai (IBM Research - India, India); Lakshmi V Thanayankizil (Georgia Institute of Technology, USA); Deva Seetharam (IBM Research - India, India); Dipanjan Chakraborty (IBM Research, India) pp. 463-466

Sustainable Instrumentation of Everyday Commodities - Concepts and Tools

Boris Brandherm (German Research Center for Artificial Intelligence, Germany); Alexander Kröner (DFKI, Germany); Jens Haupert (German Research Center for Artificial Intelligence (DFKI), Germany); Michael Schmitz (DFKI, Germany); Frank Lehmann (Kohlpharma GmbH, Germany); Ralf Gampfer (ProcMaS Consulting GmbH, Germany) pp. 467-470

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) pp. 471-474

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) pp. 475-478

HuMan: Creating Memorable Fingerprints of Mobile Users

Payas Gupta (Singapore Management University, Singapore); Kiat Wee Tan (Singapore Management University, Singapore); Narayan Ramasubbu (Singapore Management University, Singapore); David Lo (Singapore Management University, Singapore); Debin Gao (Singapore Management University, Singapore); Rajesh K Balan (Singapore Management University, Singapore) pp. 479-482

PerCom Demos 2012: PerCom Demos 2012 - Program

DEMO: Demonstration Session

The Constrained Application Protocol for Pervasive Machine-To-Machine Communications

Markus Becker (University of Bremen, Germany); Thomas Pötsch (University of Bremen, Germany); Koojana Kuladinithi (University of Bremen, Germany); Carmelita Goerg (University of Bremen, Germany) pp. 483-485

LEGS: A Load-balancing Emergency Guiding System Based on Wireless Sensor Networks

Lien-Wu Chen (Feng Chia University, Taiwan); Jen-Hsiang Cheng (National Chiao Tung University, Taiwan); Yu-Chee Tseng (National Chiao-Tung University, Taiwan); Lun-Chia Kuo (ITRI, Taiwan); Jen-Chieh Chiang (Industrial Technology Research Institute, Taiwan); Wan-Jung Lin (Industrial Technology Research Institute, Taiwan) pp. 486-488

Road Condition Monitoring and Alert Application

Avik Ghose (Tata Consultancy Services, India); Provat Biswas (Tata Consultancy Services, India); Chirabrata Bhaumik (Tata Consultancy Services & TCS Innovation Labs, India); Monika Sharma (Tata Consultancy Services Limited, India); Arpan Pal (Tata Consultancy Services, India); Abhinav Jha (Tata Consultancy Services Limited, India) pp. 489-491

Ubi-Post briefcase: a content-oriented security solution for high value shipping

Jean-François Verdonck (INRIA, France); Michel Banâtre (INRIA, France); Paul Couderc (INRIA, France) pp. 492-494

myGander: A Mobile Interface and Distributed Search Engine for Pervasive Computing

Jonas Michel (University of Texas at Austin, USA); Christine Julien (The University of Texas at Austin, USA); Jamie Payton (University of North Carolina at Charlotte, USA); Gruia-Catalin Roman (University of New Mexico, USA)

pp. 495-497

Reliability Enhancement and Performance VIsualization System for Wireless Body Area Network

Aung Aung Phyo Wai (Insitute for Infocomm Research, Singapore); Yu Ge (Institute for Infocomm Research, Singapore); Terence S.P. See (Institute for Infocomm Research, Singapore); Wei Ni (Institute for Infocomm Research, Singapore); Chee Wee Kim (Institute for Infocomm Research, Singapore); Tat Meng Chiam (Institute for Infocomm Research, Singapore) pp. 498-500

Candy Castle - A Prototype for Pervasive Health Games

Christoph Stach (University of Stuttgart, Germany); Luiz Fernando Schlindwein (University of Stuttgart, Germany) pp. 501-503

Touch-driven Interaction via an NFC-enabled Smartphone

Longbiao Chen (Zhejiang University, P.R. China); Gang Pan (Zhejiang University, P.R. China); Shijian Li (Zhejiang University, P.R. China) pp. 504-506

LugaReco: Mobile Application for Semantic Recommendation of Tourist Points of Interest using Photographs

Jose Quinteiro (Universidad de Las Palmas de Gran Canaria, Spain); Ernestina Martel-Jordán (University of Las Palmas de Gran Canaria, Spain); Pablo Hernández-Morera (University of Las Palmas de Gran Canaria, Spain); Aaron López-Rodríguez (Universidad de Las Palmas de Gran Canaria, Spain); Tomás García-Pérez (Universidad de Las Palmas de Gran Canaria, Spain) pp. 507-509

WristSense: Wrist-worn Sensor Device with Camera for Daily Activity Recognition

Takuya Maekawa (NTT, Japan); Yasue Kishino (NTT Communication Science Laboratories, Japan); Yuaka Yanagisawa (NTT Communication Science Laboratories, Japan); Yasushi Sakurai (NTT Communication Science Laboratories, Japan) pp. 510-512

ShineUS: Exploring Preferences in Public Discussion

Dan Chalmers (University of Sussex, United Kingdom); Paul Calcraft (University of Sussex, United Kingdom); Ciaran Fisher (University of Sussex, United Kingdom); Luke Whiting (University of Sussex, United Kingdom); Jon Rimmer (University of Sussex, United Kingdom); Ian Wakeman (University of Sussex, United Kingdom) pp. 513-515

PeerSense: who is near you?

Aditi Gupta (Purdue University, USA); Markus J Miettinen (Nokia, Switzerland); Marcin Nagy (Nokia Research Center, Finland); N. Asokan (Nokia Research Center, Finland); Alexandre Wetzel (EPFL, Switzerland) pp. 516-518

Configuration Folding: An Energy Efficient Technique for Context Recognition

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) pp. 519-521

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

pp. 522-524

Pervasive Emergency Support Systems for Building Evacuation

Avgoustinos Filippoupolitis (Imperial College London, United Kingdom); Gokce Gorbil (Imperial College London & Intelligent Systems and Networks Group, United Kingdom); Erol Gelenbe (Imperial College London, United Kingdom)

pp. 525-527

Thumb: A Real-Time Resource Information Sharing Application over Mobile Phones

Narisu Tao (University of Goettingen, Germany); Konglin Zhu (University of Goettingen, Germany); Xiaoming Fu (University of Goettingen, Germany) pp. 528-530

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), Egypt) pp. 531-533

IBM PhD Forum 2012: IBM PhD Forum on Pervasive Computing and Communications, 2012 - Program

PhD Forum Posters

A Ubiquitous System for Smart Reasoning for Well-Being at Home and at Work Steven Bosems (University of Twente, The Netherlands) pp. 534-535

A Generic Context Aware Gesture Recognition Framework for Smart Environments

Mathias Wilhelm (Technische Universität Berlin & DAI-Labor, Germany) pp. 536-537

Independent way-finding for visually impaired users through multi-sensorial data analysis on mobile devices

Dragan Ahmetovic (University of Milan, Italy) pp. 538-539

Mining Individual Behavior Pattern Based on Significant Locations and Spatial Trajectories

Zhenyu Chen (Institute of Computing Technology, Chinese Academy of Sciences, P.R. China) pp. 540-541

COSN: A Collaborative Opportunistic Sensor Networking Framework for People-Centric Applications

Kamini Garg (SUPSI, Switzerland) pp. 542-543

Mobilizing Search of the Here and Now

Jonas Michel (University of Texas at Austin, USA) pp. 544-545

An Interactive User Interface Adaptation Process

Veit Schwartze (TU-Berlin, Germany) pp. 546-547

Personalization in Pervasive Spaces towards Smart Interactions Design Rui Neves Madeira (Faculdade de Ciências e Tecnologia - Universidade Nova de Lisboa, Portugal) pp. 548-549

Event based content fusion in Opportunistic Environments

Michael Madhukalya (The University of Texas at Arlington, USA) pp. 550-551

User Context Recognition for Navigation Systems in Public Transportation Paul Baumann (Technische Universität Darmstadt, Germany) pp. 552-553

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) pp. 554-555

- Towards Self-Learning Radio-Based Localization Systems Islam Alyafawi (University of Bern, Switzerland) pp. 556-557
- **Concepts for Service Provision in Disaster Environments** Kamill Panitzek (Technische Universität Darmstadt, Germany) pp. 558-559

Processing the Uncertainty: Quality-aware data stream processing for dynamic context models

Christian Kuka (OFFIS, Germany) pp. 560-561

Erlang meets WSNs: a functional approach to WSN programming Alessandro Sivieri (Politecnico di Milano, Italy) pp. 562-563

Application-aware Techniques for Energy Efficient Data Collection in Wireless Sensor Networks

Usman Raza (University of Trento, Italy) pp. 564-565

Self-aware Middleware for Smart Camera networks Herwig Guggi (Alpen Adria Universität Klagenfurt, Austria) pp. 566-567

Towards a Digital Object Memory Architecture Jens Haupert (German Research Center for Artificial Intelligence (DFKI), Germany) pp. 568-569

The application of Domain-specific languages within distributed computing

Antonio Dariush Kheirkhahzadeh (University of West London, United Kingdom)

pp. 570-571

CoMoRea 2012: 9th IEEE Workshop on Context Modeling and Reasoning 2012 - Program

S1: Context-aware adaptation

Defeasible preferences for intelligible pervasive applications to enhance eldercare

Johnson Fong (The University of Queensland, Australia); Ho-Pun Lam (National ICT Australia & University of Queensland, Australia); Ricky Robinson (NICTA, Australia); Jadwiga Indulska (The University of Queensland, Australia) pp. 572-577

Rule-Based Transformation of Map Data

Bernhard Schmitz (Universität Stuttgart, Germany); Thomas Ertl (University of Stuttgart, Germany) pp. 578-583

Private Context-aware Recommendation of Points of Interest: An Initial Investigation

Daniele Riboni (University of Milan, Italy); Claudio Bettini (University of Milan, Italy)

pp. 584-589

S2: Context reasoning

Behavioural Analysis of Low Entropy Mobile People Using Contextual Information

Muhammad Azam (University of Engineering and Technology Taxila, United Kingdom); Jonathan Loo (Middlesex University, United Kingdom); Sardar Kashif Ashraf Khan (Mirpur University of Science and Technology, United Kingdom); Waleed Ejaz (Sejong University & IQRA University, Korea) pp. 590-595

Experiences on Sensor Fusion with Commonsense Reasoning

Nicola Bicocchi (University of Modena and Reggio Emilia, Italy); Gabriella Castelli (University of Modena and Reggio Emilia, Italy); Matteo Lasagni (University of Lubeck, Germany); Marco Mamei (Università di Modena e Reggio Emilia, Italy); Franco Zambonelli (University of Modena and Reggio Emilia, Italy)

pp. 596-601

Context Aware Approach for Activity Recognition Based on Precondition-Effect Rules

Kristina Yordanova (University of Rostock, Germany); Frank Krüger (University of Rostock, Germany); Thomas Kirste (University of Rostock, Germany) pp. 602-607

S3: Context modeling and management

Cost-efficient Context-aware Rule Maintenance

Viktoriya Degeler (University of Groningen, The Netherlands); Alexander Lazovik (University of Groningen, The Netherlands) pp. 608-612

Model-based Development of Context-Aware Applications Using the MILEO-Context Server

Manfred Wojciechowski (Fraunhofer ISST, Germany); Markus Wiedeler (Fraunhofer Institut, Germany) pp. 613-618

Towards a Social Context Model and Architecture for Large-Scale Pervasive Environments

Thilo Paul-Stueve (CITEC, Bielefeld University, Germany); Sven Wachsmuth (CITEC, Bielefeld University, Germany) pp. 619-624

MP2P 2012: The 8th International Workshop on Mobile Peerto-Peer Computing 2012 - Program

S1: Mobile P2P Data and Network Services (I)

Scale-Free Opportunistic Networks: is it Possible?

Stefano Ferretti (University of Bologna, Italy); Vittorio Ghini (University of Bologna, Italy); Fabio Panzieri (University of Bologna, Italy) pp. 625-630

Placement of Control Network for Mobile Agents over Opportunistic Networks Yao-Nan Lien (National Chengchi University, Taiwan); Yi-Shiuan Lin (National Chengchi University, Taiwan) pp. 631-636

Traffic-Aware Adaptive Routing Metrics for Tactical Ad Hoc Networks Bongsoo Roh (Agency for Defense Development, Korea); Mijeong Hoh (Agency for Defense Development, Korea); Kimin Hwang (Agency for Defense Development, Korea); Gui Soon Park (ADD, Korea); Suil Kim (Agency for Defense Development, Korea) pp. 637-642

S2: Mobile P2P Data and Network Services (II)

A Cluster-Based Locality-Aware Mobile Peer-to-Peer Architecture Christian Gottron (Technische Universität Darmstadt, Germany); Andre König (TU Darmstadt, Germany); Ralf Steinmetz (Technische Universität Darmstadt, Germany) pp. 643-648

AntOM: Constructing Multi-layer Overlays for Pervasive Environments Fei Peng (University of Fribourg, Switzerland); Apostolos Malatras (University of Fribourg, Switzerland); Béat Hirsbrunner (University of Fribourg, Switzerland); Michèle Courant (University of Fribourg, Switzerland) pp. 649-654

Distributed and Localized Maximum-Lifetime Data Aggregation Forest Construction in Wireless Sensor Networks

Song-Yu Liu (National Chiao Tung University, Taiwan); Chen-Che Huang (National Chiao Tung University, Taiwan); Jiun-Long Huang (National Chiao Tung University, Taiwan); Chih-Lin Hu (National Central University, Taiwan) pp. 655-660

On-tour Attraction Recommendation in a Mobile Environment

San-Yih Hwang (National Sun Yat-sen University, Taiwan); Wan-Shiou Yang (National Changhua University of Education, Taiwan) pp. 661-666

PerEL 2012: 8th IEEE International Workshop on Pervasive Learning, Life and Leisure 2012 - Program

S1: Infrastructure

Towards agile competence development

Freddy Limpens (EPFL, Switzerland); Denis Gillet (Swiss Federal Institute of Technology in Lausanne (EPFL), Switzerland) pp. 667-672

Facilitating Information Sharing and Social Interaction in Mobile Peer-to-Peer Environment

Wan-Shiou Yang (National Changhua University of Education, Taiwan); San-Yih Hwang (National Sun Yat-sen University, Taiwan); Ying-Wei Shih (National Changhua University of Education, Taiwan) pp. 673-678

S2: Learning

The need for Open Educational Resources for Ubiquitous Learning Rory McGreal (Athabasca University, Canada) pp. 679-684

Socialize Online Learning: Why we should Integrate Learning Content Management with Online Social Networks

Hendrik Roreger (Hamburg University of Applied Sciences, Germany); Thomas C. Schmidt (HAW Hamburg (DE), Germany) pp. 685-690

FreshUP - Implementation and Evaluation of a Pervasive Game for Freshmen

Wiebke Köhlmann (University of Potsdam, Germany); Raphael Zender (University of Potsdam, Germany); Ulrike Lucke (University of Potsdam, Germany) pp. 691-696

S3: Life

A Survey of Ground-truth in Emotion Data Annotation

Layale Constantine (American University of Beirut, Lebanon); Hazem Hajj (American University of Beirut, Lebanon) pp. 697-702

Towards a Pattern Language for Modeling Interactive Applications in Smart Meeting Rooms

Michael Zaki (University of Rostock, Germany) pp. 703-708

Improving Activity Recognition by Segmental Pattern Mining Umut Avci (University of Trento, Italy); Andrea Passerini (University of Trento, Italy) pp. 709-714

PerNEM 2012: Second International Workshop on Pervasive Networks for Emergency Management 2012 - Program

S1: Wireless Protocols for Emergency Management

Self-stabilizing Sensor Networks for Emergency Management

Stefan Lohs (Brandenburg University of Technology, Germany); Reinhardt Karnapke (BTU Cottbus, Germany); Jörg Nolte (BTU Cottbus, Germany); Andreas Lagemann (Brandenburgische Technische Universität Cottbus, Germany)

pp. 715-720

BATMAN Store-and-Forward: the Best of the Two Worlds

Laurent Delosières (Linköping University, Sweden); Simin Nadjm-Tehrani (Linköping University, Sweden) pp. 721-727

S2: Architectures and Systems for Emergency Management Applications

Process-Oriented Deployment of Ad-hoc Networks in Emergency Scenarios Andreas Wolff (TU Dortmund University, Germany); Christian Wietfeld (TU Dortmund University, Germany) pp. 728-733

Pannable and Fixed Camera Interactions for Enhanced Surveillance Applications with Wireless Image Sensors

CongDuc Pham (University of Pau, France) pp. 734-739

Emergency Medical Support System for Visualizing Locations and Vital Signs of Patients in Mass Casualty Incident

Teruhiro Mizumoto (Nara Institute of Science and Technology, Japan); Shinya Imazu (Nara Institute of Science and Technology, Japan); Weihua Sun (Nara Institute of Science and Technology, Japan); Naoki Shibata (Shiga University, Japan); Keiichi Yasumoto (Nara Institute of Science and Technology, Japan) pp. 740-745

S3: Emergency Communication Systems

Malicious Threats and Novel Security Extensions in P2PSIP

Christos Tselios (University of Patras, Greece); Konstantinos Birkos (University of Patras, Greece); Panagiotis Galiotos (University of Patras, Greece); Stavros Kotsopoulos (Wireless Telecommunications Laboratory, Greece); Tasos Dagiuklas (Technological Educational Institute of Mesolonghi, Greece) pp. 746-751

XMPP to the Rescue: Enhancing Post Disaster Management and Joint Task Force Work

Ronny Klauck (IHP GmbH, Germany); Michael Kirsche (Brandenburg University of Technology Cottbus, Germany) pp. 752-757

Identifying Network Failure via Detecting Changes in Power Profile

Toktam Mahmoodi (King's College London, United Kingdom); Manuel Roveri (Politecnico di Milano, Italy) pp. 758-763

PWN 2012: Eighth IEEE PerCom Workshop on Pervasive Wireless Networking 2012 - Program

Session 1: Resource Management

Performance Evaluation of Scheduling Algorithms for Mobile WiMAX Networks Preethi Chandur (IIT Madras, India); R M Karthik (Centre of Excellence in Wireless Technology, India); Krishna M. Sivalingam (Indian Institute of Technology Madras, India) pp. 764-769

A Markov Random Field Framework for Channel Assignment in Cognitive Radio Networks

Evangelos Anifantis (National Technical University of Athens, Greece); Vasileios A Karyotis (National Technical University of Athens, Greece); Symeon Papavassiliou (Institute of Comm. and Comp. Systems/National Technical University of Athens, Greece) pp. 770-775

Load Sensitive Flow Management Extensions To QoS Routing Based On OSPF Parwinder Singh (University of Bremen, Germany); Amanpreet Singh (University of Bremen, Germany); Carmelita Goerg (University of Bremen, Germany) pp. 776-781

Session 2: Pervasive Wireless Networking with Smart Phones

- Share your view: wireless multi-hop video streaming using Android phones Peizhao Hu (National ICT Australia, Australia); Nick Symons (The University of Queensland, Australia); Jadwiga Indulska (The University of Queensland, Australia); Marius Portmann (University of Queensland, Australia) pp. 782-787
- *Offloading Android Applications to the Cloud without Customizing Android* Eric Y. Chen (NTT Corporation, Japan); Satoshi Ogata (eflow Inc., Japan); Keitaro Horikawa (NTT & Information Sharing Platform Laboratories, Japan) pp. 788-793

Indoor Location Detection with a RSS-based Short Term Memory Technique (KNN-STM)

Bulut Altintas (Yeditepe University, Turkey); Tacha Serif (Yeditepe University, Turkey)

pp. 794-798

Session 3: Wireless Architecture

A Measurement Study and Implication for Architecture Design in Wireless Body Area Networks

Yu Ge (Institute for Infocomm Research, Singapore); Liang Liang (University of Electronic Science and Technology of China, P.R. China); Wei Ni (Institute for Infocomm Research, Singapore); Aung Aung Phyo Wai (Institute for Infocomm Research, Singapore); Gang Feng (University of Electronic Science and Technology of China, P.R. China) pp. 799-804

"Always Best Packet Switching" for SIP Services

Vittorio Ghini (University of Bologna, Italy); Stefano Ferretti (University of Bologna, Italy); Fabio Panzieri (University of Bologna, Italy) pp. 805-810

Looking for needles in a haystack: Detecting Counterfeits in Large Scale RFID Systems using Batch Authentication Protocol

Farzana Rahman (Marquette University, USA); Sheikh Iqbal Ahamed (Marquette University, USA) pp. 811-816

SeNAmI 2012: 4th International Workshop on Sensor Networks and Ambient Intelligence 2012 - Program

S1: Tools and methodologies to design Smart Spaces

- BRIX An Easy-to-Use Modular Sensor and Actuator Prototyping Toolkit Sebastian Zehe (Bielefeld University, Germany); Tobias Grosshauser (Bielefeld University, Germany); Thomas Hermann (Bielefeld University, Germany) pp. 817-822
- Architecture for end-user programming of cross-smart space applications Marko Palviainen (VTT Technical Research Centre of Finland, Finland); Jarkko Kuusijärvi (VTT Technical Research Centre of Finland, Finland); Eila Ovaska (VTT Technical Research Centre of Finland, Finland) pp. 823-828

A Development Methodology to Facilitate the Integration of Smart Spaces into the Web of Things

Iván Corredor (Universidad Politécnica de Madrid, Spain); Josue Iglesias (Universidad Politecnica de Madrid, Spain); Ana M. Bernardos (Universidad Politecnica de Madrid, Spain); Jose R Casar (Universidad Politecnica de Madrid, Spain) pp. 829-834

S2: Trends in architectures and reasoning for Smart Spaces

Performance Evaluation of a Semantic Smart Space Deployment

Gerrit Niezen (Eindhoven University of Technology, The Netherlands); Bram van der Vlist (Eindhoven University of Technology, The Netherlands); Sachin Bhardwaj (Eindhoven University of Technology, The Netherlands); Tanir Özçelebi (Eindhoven University of Technology, The Netherlands) pp. 835-841

Global Ambient Intelligence: an Autonomic Approach

Michele Amoretti (Università degli Studi di Parma, Italy); Marco Picone (University of Parma, Italy); Francesco Zanichelli (University of Parma, Italy) pp. 842-847

An Inference Sharing Architecture For a More Efficient Context Reasoning Aitor Almeida (DeustoTech - Deusto Institute of Technology, Spain); Diego López-de-Ipiña (University of Deusto, Spain) pp. 848-852

On Detecting Service Chains in Sensor-Driven Home Network Services Takuya Inada (Kobe University, Japan); Kousuke Ikegami (Kobe University, Japan); Matsumoto Shinsuke (Kobe University, Japan); Masahide Nakamura (Kobe University, Japan); Hiroshi Igaki (Kobe University, Japan) pp. 853-858

S3: Detecting user's activity for Smart Applications

Towards Abnormal Behavior Detection of Cognitive Impaired People Antonio Coronato (ICAR-CNR, Italy); Luigi Gallo (ICAR-CNR, Italy) pp. 859-864

Ontological representation of time-of-flight camera data to support visionbased AmI

Miguel Ángel Serrano (Universidad Carlos III de Madrid, Spain); Juan Gómez-Romero (Universidad Carlos III de Madrid, Spain); Miguel Angel Patricio (Universidad Carlos III de Madrid, Spain); Jesus García (Universidad Carlos III de Madrid, Spain); Jose Manuel Molina (Universidad Carlos III de Madrid, Spain) pp. 865-870

Towards a fuzzy-based multi-classifier selection module for activity recognition applications

Henar Martín (Universidad Politecnica de Madrid, Spain); Josue Iglesias (Universidad Politecnica de Madrid, Spain); Jesús Cano (Universidad Politecnica de Madrid, Spain); Ana M. Bernardos (Universidad Politecnica de Madrid, Spain); Jose R Casar (Universidad Politecnica de Madrid, Spain) pp. 871-876

Sensing Mobile Phone Interaction in the Field

Florian Lettner (University of Applied Sciences Upper Austria, Austria); Clemens Holzmann (University of Applied Sciences Upper Austria, Austria) pp. 877-882

S4: Topics on WSN for Smart Spaces

D-UREA: Distributed Uncovered Region Exploration Algorithm for Reorganization of Sensor Nodes to Maximize Coverage

Manisha Jitendra Nene (Defence Institute of Advanced Technology, India); Rajendra Deodhar (Defence Institute of Advanced Technology, India); L. m. Patnaik (Indian Institue of Science, India) pp. 883-888

HCMTT: Hybrid Clustering for Multi-Target Tracking in Wireless Sensor Networks

Faezeh Hajiaghajani (Amirkabir University of Technology, Iran); Marjan Naderan (Shahid Chamran University of Ahwaz & Engineering Faculty, Iran); Hosein Pedram (, Iran); Mehdi Dehghan (Amirkabir University of Technology, Iran)

pp. 889-894

Resource coordination in wireless sensor networks by cooperative reinforcement learning

Muhidul Islam Khan (University of Klagenfurt & Researcher, Pervasive Computing Group, University of Klagenfurt, Austria); Bernhard Rinner (Klagenfurt University, Austria) pp. 895-900

SIPC 2012: The Second IEEE International Workshop on Social Implications of Pervasive Computing 2012 - Program

S1: Keynote

Keynote: From Labs to Cities: Mapping the Social Impact of Ubiquitous Technologies

Vassilis Kostakos (University of Oulu, Portugal) pg. 901

S2: Sharing Research Data

Studying the Impact of Ubiquitous Monitoring Technology on Office Worker Behaviours: The Value of Sharing Research Data

Stuart Moran (University of Nottingham, United Kingdom); Irene Lopez de Vallejo (Tekniker IK4, Spain); Keiichi Nakata (University of Reading, United Kingdom); Ruth Conroy-Dalton (University College of London, United Kingdom); Rachael Luck (University of Reading, United Kingdom); Peter McLennan (University College of London, United Kingdom); Stephen Hailes (University College London, United Kingdom) pp. 902-907

S3: Designing Privacy for Living and Working

Value-Sensitive Design Patterns for Pervasive Health Care

Christian Detweiler (Delft University of Technology, The Netherlands); Koen Hindriks (Delft University of Technology, The Netherlands) pp. 908-913

Towards a Trustworthy Privacy in Pervasive Video Surveillance Systems Antoni Martínez-Ballesté (Universitat Rovira i Virgili, Spain); Hatem Rashwan (Universitat Rovira i Virgili, Spain); Domenec Puig (University Rovira i Virgili, Spain); Antonia Paniza Fullana (Universitat de les Illes Balears, Spain) pp. 914-919

S4: Social Consequences of System Design

Social Issues of Power Harvesting as Key Enables of WSN in Pervasive Computing

Jorge Berzosa (Tekniker-Ik4, Spain); Jon Mabe (Tekniker-Ik4, Spain); Neil J Grabham (University of Southampton, United Kingdom); John Tudor (University of Southampton, United Kingdom) pp. 920-924

Design Guidelines for Pervasive Computing: Implications of Technology Use in Africa

Amandeep Dhir (Aalto University, Finland); Nobert Jere (Telkom Centre of Excellence in ICTD & University of Fort Hare, South Africa); Puneet Kaur (Aalto University, Finland); Mikko Heiskala (Aalto University, Finland); Ibrahim Albidewi (King Abdulaziz University, Saudi Arabia); Daniyal M Alghazzawi (King Abdulaziz University, Saudi Arabia) pp. 925-930