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Technical Program

Tuesday, March 22

Session 1: Context Modeling

Recognizing Interleaved and Concurrent Activities: A Statistical-Relational Approach

Rim Helaoui (University of Mannheim, Germany); Mathias Niepert (University of Mannheim, Germany); Heiner Stuckenschmidt (University of Mannheim, Germany)

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Hybrid Context Inconsistency Resolution for Context-Aware Services

Chenhua Chen (Saarland University, Germany); Chunyang Ye (Institute of Software, Chinese Academy of Sciences, Canada); Hans-Arno Jacobsen (University of Toronto, Canada)

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Interpretation of Inconsistencies via Context Consistency Diagrams

Viktoriya Degeler (University of Groningen, The Netherlands); Alexander Lazovik (University of Groningen, The Netherlands)

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Session 2: Pervasive Healthcare Applications

Feasibility Study of a Wearable Carbon Monoxide Warning System for Construction Workers

Jason Forsyth (Virginia Tech, USA); Thomas L. Martin (Virginia Tech, USA); Deborah Young-Corbett (Virginia Tech, USA); Ed Dorsa (Virginia Tech, USA)

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On-body Device Localization for Health and Medical Monitoring Applications

Alireza Vahdatpour (UCLA, USA); Navid Amini (UCLA, USA); Majid Sarrafzadeh (UCLA, USA)

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Phase Recognition during Surgical Procedures using Embedded and Body-worn Sensors

Jakob E. Bardram (IT University of Copenhagen, Denmark); Afsaneh Doryab (IT University of Copenhagen, Denmark); Rune M. Jensen (IT University of Copenhagen, Denmark); Poul M. Lange (IT University of Copenhagen, Denmark); Kristian L. G. Nielsen (IT University of Copenhagen, Denmark); Soeron T. Petersen (IT University of Copenhagen, Denmark)

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Session 3: Best Papers

Jyotish: A Novel Framework for Constructing Predictive Model of People Movement from Joint Wifi/Bluetooth Trace

Long Vu (University of Illinois, USA); Quang Do (University of Illinois, USA); Klara Nahrstedt (University of Illinois at Urbana-Champaign, USA)

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An Energy-Efficient Quality Adaptive Framework for Multi-Modal Sensor Context Recognition

Nirmalya Roy (Institute for Infocomm Research, Singapore); Archan Misra (Singapore Management University, Singapore); Christine Julien (The University of Texas at Austin, USA); Sajal K. Das (University of Texas at Arlington, USA); Jit Biswas (Institute for Infocomm Research, Singapore)

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uDirect: A Novel Approach for Pervasive Observation of User Direction with Mobile Phones

Seyed Amir Hoseinitabatabaei (University of Surrey, United Kingdom); Alexander Gluhak (The University of Surrey, United Kingdom); Rahim Tafazolli (University of Surrey, United Kingdom)
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Session 4: Privacy and Security

Reclaiming Privacy for Smartphone Applications

Emiliano De Cristofaro (University of California, Irvine, USA); Anthony Durussel (Nokia Research Center, Switzerland); Imad Aad (Nokia Research Center, Switzerland)
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P3-Coupon: a Probabilistic System for Prompt and Privacy-preserving Electronic Coupon Distribution

Boying Zhang (The Ohio State University, USA); Jin Teng (The Ohio State University, USA); Xiaole Bai (University of Massachusetts Dartmouth, USA); Zhimin Yang (Microsoft, USA); Dong Xuan (The Ohio State University, USA)
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AnonPri: An Efficient Anonymous Private Authentication Protocol

Md. Endadul Hoque (Purdue University, USA); Farzana Rahman (Marquette University, USA); Sheikh Iqbal Ahamed (Marquette University, USA)
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Session 5: Opportunistic Networking and Sensing

Mobile Node Rostering in Intermittently Connected Passive RFID Networks

Zhipeng Yang (University of Louisiana at Lafayette, USA); Hongyi Wu (University of Louisiana at Lafayette, USA)
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RegReS: Adaptively Maintaining a Target Density of Regional Services in Opportunistic Vehicular Networks

Emmanouil Koukoumidis (Princeton University, USA); Li-Shiuan Peh (Princeton University, USA); Margaret Martonosi (Princeton University, USA)
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Participatory Sensing Algorithms for Mobile Object Discovery in Urban Areas

Harald Weinschrott (University of Stuttgart, IPVS, Germany); Julian Weisser (University of Stuttgart, Germany); Frank Dürr (University of Stuttgart, Germany); Kurt Rothermel (University of Stuttgart, Germany)
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Floating Content: Information Sharing in Urban Areas

Joerg Ott (Aalto University, Finland); Esa Hyttiä (Aalto University, Finland); Pasi Lassila (Helsinki University of Technology, Finland); Tobias Vaegs (RWTH Aachen University, Germany); Jussi Kangasharju (University of Helsinki, Finland)
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Motion Fault Detection and Isolation in Body Sensor Networks

Duk-JIn Kim (University of Texas at Dallas, USA); Balakrishnan Prabhakaran (University of Texas at Dallas, USA)
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Using AI Planning and Late Binding for Managing Service Workflows in Intelligent Environments

Julien Bidot (University of Ulm, Germany); Christos Goumopoulos (Computer Technology Institute, Greece); IoannisCALEMIS (Computer Technology Institute, Greece)
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Adaptive Client Side Object Replication for Response Time Improvement in Pervasive Environments

Norizam Katmon (RMIT University, Australia); Caspar Ryan (RMIT University, Australia)
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Model-Driven Engineering of Planning and Optimisation Algorithms for Pervasive Computing Environments

Anthony Harrington (Trinity College Dublin, Ireland); Vinny Cahill (Trinity College Dublin, Ireland)
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Session 6B: Positioning and Privacy

Vibrate-to-Unlock: Mobile Phone Assisted User Authentication to Multiple Personal RFID Tags

Nitesh Saxena (Polytechnic Institute of New York University, USA); Md. Borhan Uddin (Polytechnic Institute of New York University, USA); Jonathan Voris (Polytechnic Institute of New York University, USA); N. Asokan (Nokia Research Center, Finland)
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Position Sharing for Location Privacy in Non-trusted Systems

Frank Dürr (University of Stuttgart, Germany); Pavel Skvortsov (University of Stuttgart, Germany); Kurt Rothermel (University of Stuttgart, Germany)
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RASS: A Real-time, Accurate and Scalable System for Tracking Transceiver-free Objects

Dian Zhang (Hong Kong University of Science and Technology, Hong Kong); Yunhuai Liu (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, P.R. China); Lionel Ni (Hong Kong University of Science and Technology, Hong Kong)
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An Efficient Localization Algorithm Focusing on Stop-and-Go Behavior of Mobile Nodes

Takamasa Higuchi (Osaka University, Japan); Sae Fujii (Osaka University, Japan); Hirozumi Yamaguchi (Osaka University, Japan); Teruo Higashino (Osaka University, Japan)
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Session 7: Positioning and Tracking Technologies

Tracking Vehicular Speed Variations by Warping Mobile Phone Signal Strengths

Gayathri Chandrasekaran (Rutgers University, USA); Tam Vu (Rutgers University, USA); Alexander Varshavsky (AT&T Labs, USA); Marco Gruteser (WINLAB / Rutgers University, USA); Richard Martin (Rutgers University, USA); Jie Yang (Stevens Institute of Technology, USA); Yingying Chen (Stevens Institute of Technology, USA)
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A Robust Dead-Reckoning Pedestrian Tracking System with Low Cost Sensors

Yunye Jin (National University of Singapore, Singapore); Hong-Song Toh (National University of Singapore, Singapore); Wee-Seng Soh (National University of Singapore, Singapore); Wai-Choong Wong (National University of Singapore, Singapore)
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Bidirectional Pose Estimation

Jarmo Kauko (Nokia, Finland)

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