## **Table of Contents**

Indoor Navigation by WLAN Location Fingerprinting - Reducing Training-Efforts with Interpolated Radio Map Roland Dutzler, Martin Ebner, and Robert Brandner	1
Facilitating Utilization of Public Transportation for Disabled Persons by an Open Location-Based Travel Information System for Mobile Devices (VIATOR)  Wolfgang Narzt	7
Analytical Modeling of Partially Shared Caches in Embedded CMPs  Wei Zang and Ann Gordon-Ross	13
Challenges for e-Learning Environments in m-Learning Contexts: A survey about the hardware, software, and educational dimensions  Andre C. da Silva and Heloisa V. da Rocha	20
Achieving Cooperative Sensing in Automotive Scenarios Through Complex Event Processing Christoph Steup, Sebastian Zug, and Jorg Kaiser	26
Enabling Mobile Access to Distributed Recycling Knowledge  Sonke Knoch and Alexander Kroner	30
Towards a Middleware to Infer the Risk Level of an Activity in Context-Aware Environments Using the SRK Model Alfredo Del Fabro Neto, Rafael Boufleuer, Bruno Romero de Azevedo, Iara Augustin, Joao Carlos D. Lima, and Cristiano C. Rocha	38
T-Bookmarks: Providing TV-related Web Resources at Anywhere  Douglas Veras, Thiago Prota, and Carlos Ferraz	43
Ubiquitous Learning – Treating the Context of Students Learning Styles  Andreia Rosangela Kessler Muhlbeier, Felipe Becker Nunes, Gleizer Bierhalz Voss, Rafaela Ribeiro Jardim, and Roseclea Duarte Medina	50
Treating Context Information in a Ubiquitous Virtual Learning Environment (UVLEQoC): Application of metric for Quality of Context (QoC)  Felipe Becker Nunes, Gleizer Bierhalz Voss, Andreia Rosangela Kessler Muhlbeier, Fabricio Herpich, and Roseclea Duarte Medina	s 55
Context Awareness for Service Desk Management  Jaziel Souza Lobo and Roseclea Duarte Medina	59
Fostering Access to Data Collections in the Internet of Things  Alexander Kroner, Jens Haupert, Christian Hauck, Matthieu Deru, and Simon Bergweiler	65

The Effect of Feedback on Chord Typing  Adrian Tarniceriu, Pierre Dillenbourg, and Bixio Rimoldi	69
Exploring the Tradeoffs of Configurability and Heterogeneity in Multicore Embedded Systems  Tosiron Adegbija and Ann Gordon-Ross	75
Smart Chair: What Can Simple Pressure Sensors under the Chairs' Legs Tell Us about User Activity? Jingyuan Cheng, Bo Zhou, Mathias Sundholm, and Paul Lukowicz	81
VANET Route Selection in Urban/Rural Areas using Metric Base Traffic Analysis Syed Fakhar Abbas, Saqib Rasool Chaudhry, and Ghulam Yasin	85
Spaces-Based Communication: an Extension to Support Infinite Spatial Models  Diego Bernini, Francesco Fiamberti, Daniela Micucci, Francesco Tisato, and Alessio Vertemati	92
Evaluating Student Attitudes on Ubiquitous e-Learning  Timothy Arndt and Angela Guercio	98
Self-Organizing Localization for Wireless Sensor Networks Based on Neighbor Topology Yasuhisa Takizawa, Yuto Takashima, and Naotoshi Adachi	102
Application Driven Environment Representation  Andre Dietrich, Jorg Kaiser, Sebastian Zug, and Sasanka Potluri	109
WSN Trends: Sensor Infrastructure Virtualization as a Driver Towards the Evolution of the Internet of Things Andreas Merentitis, Florian Zeiger, Marco Huber, Nick Frangiadakis, Kostas Mathioudakis, Konstantinos Sasloglou, Georgios Mazarakis, Vangelis Gazis, and Zachos Boufidis	113
An Efficient Cooperative Parking Slot Assignment Solution Naourez Mejri, Mouna Ayari, and Farouk Kamoun	119
Innovations in User Interfaces for Pervasive Computing  Javier Oliver and Begona Garcia	126
Mobile Ubiquitous System Adapted to Locate Disabled and Old People Living in Rural Areas Raul Igual, Inmaculada Plaza, and Carlos Medrano	130
Capture and Access Tools for Event Annotation and Visualisation Rebekah Hunter, Mark P. Donnelly, Dewar D. Finlay, George Moore, and Nichola Booth	134
Unconventional TV Detection using Mobile Devices  Mohamed Ibrahim, Ahmed Saeed, Moustafa Youssef, and Khaled Harras	140

Mobile Architecture for Identifying Users in Ubiquitous Environments Focused on Percontrol Valderi Leithardt, Guilherme Borges, Carlos Rolim, Anubis Rossetto, Ivan Carrera, David Nunes, Jorge Silva, and Claudio Geyer	145
Security Adaptation Based on Autonomic and Trust Systems for Ubiquitous mobile network and Green IT Tewfiq El Maliki and Jean-Marc Seigneur	152
A Mathematical Model for Improving Lightweight Security with Network Coding  Alireza Esfahani, Alberto Nascimento, Du Yang, and Jonathan Rodriguez	159
MAC Spoofing Attack Detection based on EVM in 802.11 WLAN  Gaeil An and Shin-hyo Kim	163