

Contents

Embedded and Mobile Software Systems, Theory and Application

Towards Automated UI-Tests for Sensor-Based Mobile Applications.	3
<i>Tobias Griebel, Marc Hesenius, and Volker Gruhn</i>	
Indoor Position Detection Using BLE Signals Based on Voronoi Diagram . . .	18
<i>Kensuke Onishi</i>	
Mobile Application Testing in Industrial Contexts: An Exploratory Multiple Case-Study	30
<i>Samer Zein, Norsaremah Salleh, and John Grundy</i>	
An Efficient Reconfiguration-Based Approach for Improving Smart Grid Performance	42
<i>Syrine Ben Meskina, Narjes Doggaz, and Mohamed Khargui</i>	

Real Time Systems

PEDASA: Priority, Energy and Deadline Aware Scheduling Algorithm	59
<i>Maroua Gasmi, Olfa Mosbahi, Mohamed Khargui, and Luis Gomes</i>	
New Pack Oriented Solutions for Energy-Aware Feasible Adaptive Real-Time Systems	73
<i>Aymen Gammoudi, Adel Benzina, Mohamed Khargui, and Daniel Chillet</i>	
New Solutions for Useful Execution Models of Communicating Adaptive RA2DL	87
<i>Farid Adaili, Olfa Mosbahi, Mohamed Khargui, and Samia Bouzebrane</i>	

Requirement Engineering, High-Assurance and Testing System

Architectural Specification and Analysis of the Aegis Combat System.	105
<i>Mert Ozkaya</i>	
Visualization of Checking Results for Graphical Validation Rules.	120
<i>Sören Witt, Sven Feja, Christian Hadler, Andreas Speck, and Elke Pulvermüller</i>	
Processor Rescue: Safe Coding for Hardware Aliasing.	137
<i>Peter T. Breuer, Jonathan P. Bowen, and Simon Pickin</i>	

Automatic Test Data Generation Targeting Hybrid Coverage Criteria.	149
<i>Ahmed El-Serafy, Cherif Salama, and Ayman Wahba</i>	
Optimization of Generated Test Data for MC/DC	161
<i>Ghada El-Sayed, Cherif Salama, and Ayman Wahba</i>	

Social Networks and Big Data

Hybridized Feature Set for Accurate Arabic Dark Web Pages Classification	175
<i>Thabit Sabbah and Ali Selamat</i>	
Accelerating Keyword Search for Big RDF Web Data on Many-Core Systems	190
<i>Chidchanok Choksuchat, Chantana Chantrapornchai, Michael Haidl, and Sergei Gorlatch</i>	
Finding Target Users Interested in Regional Areas Using Online Advertising and Social Network Services	203
<i>Jun Sasaki, Shizune Takahashi, Li Shuang, Issei Komatsu, Keizo Yamada, and Masanori Takagi</i>	
Semi-automatic Detection of Sentiment Hashtags in Social Networks	216
<i>Gajo Petrovic and Hamido Fujita</i>	

Cloud Computing and the Semantic Web

Ontology-Based Technology for Development of Intelligent Scientific Internet Resources.	227
<i>Yury Zagorulko and Galina Zagorulko</i>	
A Science Mapping Analysis of the Literature on Software Product Lines . . .	242
<i>Ruben Heradio, Hector Perez-Morago, David Fernandez-Amoros, Francisco Javier Cabrerizo, and Enrique Herrera-Viedma</i>	
Asymmetry Theory and Asymmetry Based Parsing	252
<i>Anna Maria Di Sciullo</i>	
Reuse of Rules in a Mapping-Based Integration Tool	269
<i>Vladimir Dimitrieski, Milan Ćeliković, Nemanja Igić, Heiko Kern, and Fred Stefan</i>	

Artificial Intelligence Techniques and Intelligent System Design

An Arbitrary Heuristic Room Matching Algorithm in Obtaining an Enhanced Initial Seed for the University Course Timetabling Problem.	285
<i>Teoh Chong Keat, Habibollah Haron, Antoni Wibowo, and Mohd. Salihin Ngadiman</i>	

Evaluating Extant Uranium: Linguistic Reasoning by Fuzzy Artificial Neural Networks	296
<i>M. Reza Mashinchi, Ali Selamat, and Suhaimi Ibrahim</i>	
A Method for Class Noise Detection Based on K-means and SVM Algorithms	308
<i>Zahra Nematzadeh, Roliana Ibrahim, and Ali Selamat</i>	
GDM-VieweR: A New Tool in R to Visualize the Evolution of Fuzzy Consensus Processes	319
<i>Raquel Ureña, Francisco Javier Cabrerizo, Francisco Chiclana, and Enrique Herrera-Viedma</i>	
Swarm Intelligence in Evacuation Problems: A Review	333
<i>Guido Guizzi, Francesco Gargiulo, Liberatina Carmela Santillo, and Hamido Fujita</i>	
A Framework for a Decision Tree Learning Algorithm with Rough Set Theory	341
<i>Masaki Kurematsu, Jun Hakura, and Hamido Fujita</i>	
Software Development and Integration	
Description and Implementation of Business Logic for End-User-Initiative Development	355
<i>Takeshi Chusho and Jie Xu</i>	
Combining of Kanban and Scrum Means with Programmable Queues in Designing of Software Intensive Systems	367
<i>Petr Sosnin</i>	
Efficient Supply Chain Management via Federation-Based Integration of Legacy ERP Systems.	378
<i>Luigi Coppolino, Salvatore D'Antonio, Carmine Massei, and Luigi Romano</i>	
BizDevOps: Because DevOps is Not the End of the Story	388
<i>Volker Gruhn and Clemens Schäfer</i>	
Modeling Tools for Social Coding	399
<i>Mirai Watanabe, Yutaka Watanobe, and Alexander Vazhenin</i>	
Security and Software Methodologies for Reliable Software Design	
A Change Impact Analysis Tool: Integration Between Static and Dynamic Analysis Techniques	413
<i>Nazri Kama, Saiful Adli Ismail, Kamilia Kamardin, Norziha Megat Zainuddin, Azri Azmi, and Wan Shafiuddin Zainuddin</i>	

On the Probabilistic Verification of Time Constrained SysML State Machines	425
<i>Abdelhakim Baouya, Djamel Bennouar, Othmane Ait Mohamed, and Samir Ouchani</i>	
HMAC Authentication Mechanisms in a Grid Computing Environment Using Gridsim Toolkit.	442
<i>Saiful Adli Ismail, Md Asri Ngadi, Johan Mohd Sharif, Nazri Kama, and Othman Mohd Yusop</i>	
Hermes: A Targeted Fuzz Testing Framework	453
<i>Caleb Shortt and Jens Weber</i>	
New Middleware for Secured Reconfigurable Real-Time Systems	469
<i>Rim Idriss, Adlen Loukil, and Mohamed Khalgui</i>	
New Software Techniques in Image Processing and Computer Graphics	
Real-Time Light Shaft Generation for Indoor Rendering	487
<i>Hoshang Kolivand, Mohd Shahrizal Sunar, and Ali Selamat</i>	
Motif Correlogram for Texture Image Retrieval	496
<i>Atoany Nazareth Fierro-Radilla, Gustavo Calderon-Auza, Mariko Nakano-Miyatake, and Héctor Manuel Pérez-Meana</i>	
Face Recognition Under Bad Illumination Conditions	506
<i>Daniel Toledo de los Santos, Mariko Nakano-Miyatake, Karina Toscano-Medina, Gabriel Sanchez-Perez, and Hector Perez-Meana</i>	
A Prototype for Anomaly Detection in Video Surveillance Context	517
<i>F. Persia, D. D'Auria, G. Sperli, and A. Tufano</i>	
A Facial Expression Recognition with Automatic Segmentation of Face Regions	529
<i>Andres Hernandez-Matamoros, Andrea Bonarini, Enrique Escamilla-Hernandez, Mariko Nakano-Miyatake, and Hector Perez-Meana</i>	
Automatic Estimation of Illumination Features for Indoor Photorealistic Rendering in Augmented Reality.	541
<i>Hasan Alhajhamad, Mohd Shahrizal Sunar, and Hoshang Kolivand</i>	
Improving the Efficiency of a Hospital ED According to Lean Management Principles Through System Dynamics and Discrete Event Simulation Combined with Quantitative Methods	555
<i>Ilaria Bendato, Lucia Cassettari, Roberto Mosca, and Fabio Rolando</i>	

Software Applications Systems for Medical Health Care

Robust Psychiatric Decision Support Using Surrogate Numbers	575
<i>Mats Danielson, Love Ekenberg, and Kristina Sygel</i>	
Supporting Active and Healthy Ageing by Exploiting a Telepresence Robot and Personalized Delivery of Information.	586
<i>Amedeo Cesta, Gabriella Cortellessa, Riccardo De Benedictis, and Domenico M. Pisanelli</i>	
A Conceptual Model of Human Behaviour in Socio-technical Systems	598
<i>Mario Di Nardo, Mosè Gallo, Marianna Madonna, and Liberatina Carmela Santillo</i>	
A System Dynamics Model for Bed Management Strategy in Health Care Units	610
<i>Giuseppe Converso, Sara Di Giacomo, Teresa Murino, and Teresa Rea</i>	
A Simulation Approach for Agile Production Logic Implementation in a Hospital Emergency Unit.	623
<i>Giuseppe Converso, Giovanni Improta, Manuela Mignano, and Liberatina C. Santillo</i>	
Author Index	635

Intelligent Software Methodologies, Tools and
Techniques

14th International Conference, SoMet 2015, Naples,
Italy, September 15-17, 2015. Proceedings

Fujita, H.; Guizzi, G. (Eds.)

2015, XVII, 636 p. 276 illus., Softcover

ISBN: 978-3-319-22688-0