

Contents

Part I Invited Paper

Context-Aware Decision Support in Dynamic Environments: Theoretical and Technological Foundations	3
Alexander Smirnov, Tatiana Levashova, Nikolay Shilov and Alexey Kashevnik	

Part II Papers

Creating Hybrid Simulation Systems Using a Flexible Meta Data Approach	23
Juergen Rossmann, Michael Schluse and Ralf Waspe	
Simulation of Real-Time Multiprocessor Scheduling Using DES	37
Maxime Chéramy, Anne-Marie Déplanche and Pierre-Emmanuel Hladik	
Epidemics and Their Implications in Urban Environments: A Case Study on a National Scope	55
Robert Elsässer, Adrian Ogierman and Michael Meier	
Hybrid Multilinear Modeling and Applications	71
Georg Pangalos, Annika Eichler and Gerwald Lichtenberg	
Modeling Interdependent Socio-technical Networks: The Smart Grid—An Agent-Based Modeling Approach	87
Daniël Worm, David Langley and Julianna Becker	

A Heuristic Bidding Price Decision Algorithm Based on Cost Estimation Accuracy Under Limited Engineering Man-Hours in EPC Projects. 101
 Nobuaki Ishii, Yuichi Takano and Masaaki Muraki

Intelligent Agents for Human Behavior Modeling as Support to Operations. 119
 Agostino G. Bruzzone, Marina Massei, Simonluca Poggi, Christian Bartolucci and Angelo Ferrando

Alternative to Multifractal Analysis of Scalable Random Variables Applied to Measured and Estimated Soil Properties at an Arizona Field Site. 133
 Alberto Guadagnini, Shlomo P. Neuman, Marcel G. Schaap and Monica Riva

Adaptive Neuro Fuzzy Inference System Used to Build Models with Uncertain Data: Study Case for Rainfed Maize in the State of Puebla (Mexico) 145
 Anáis Vermonden, Carlos Gay-García and Iván Paz-Ortiz

Separation of Carbon Dioxide from Synthesis Gas Containing Steam by Pressure Swing Adsorption at Mid-high Temperature 157
 Cheng-tung Chou, Yu-Hau Shih, Yu-Jie Huang and Hong-sung Yang

Fuzzy Climate Scenarios for Temperature Indicate that Things Could Be Worse Than Previously Thought 171
 Carlos Gay García and Oscar Sánchez Meneses

Efficient Design of Inline E-Plane Waveguide Extracted Pole Filters Through Enhanced Equivalent Circuits and Space Mapping. 185
 Oleksandr Glubokov, Slawomir Koziel and Leifur Leifsson

Decomposition and Space Mapping for Reduced-Cost Modeling of Waveguide Filters. 199
 Slawomir Koziel, Stanislav Ogurtsov and Leifur Leifsson

Quasi-Monte Carlo and RBF Metamodeling for Quantile Estimation in River Bed Morphodynamics 211
 Tanja Clees, Igor Nikitin, Lialia Nikitina and Sabine Pott

**Multi-objective Optimization by Using Modified PSO
Algorithm for Axial Flow Pump Impeller 223**
H.S. Park and Fu-qing Miao

**A Public Health Model for Simulating Policy Interventions
to Reduce Nonmedical Opioid Use 239**
Alexandra Nielsen, Wayne Wakeland and Amanuel Zimam

**Supervisory Fuzzy Cognitive Map Structure for Triage Assessment
and Decision Support in the Emergency Department. 255**
Voula C. Georgopoulos and Chrysostomos D. Stylios

Author Index 271

Simulation and Modeling Methodologies, Technologies
and Applications

International Conference, SIMULTECH 2013 Reykjavík,
Iceland, July 29-31, 2013 Revised Selected Papers
Obaidat, M.S.; Koziel, S.; Kacprzyk, J.; Leifsson, L.; Ören,
T. (Eds.)

2015, XV, 272 p. 151 illus., 27 illus. in color., Softcover
ISBN: 978-3-319-11456-9