

Table of Contents

| | |
|--|----|
| A Model of Pulsation for Evolutive Formalizing Incomplete Intelligent Systems <i>Marta Franova and Yves Kodratoff</i> | 1 |
| Intelligent Software Development Method by Model Driven Architecture <i>Keinosuke Matsumoto, Kimiaki Nakoshi, and Naoki Mori</i> | 7 |
| A Professional Competency Development of Service Oriented Industry Based SIA-NRM Approach <i>Chia-Li Lin and Yen-Yen Chen</i> | 13 |
| Intelligent Media Format Conversion for Universal Multimedia Service over Heterogeneous Environments <i>Kwang-eun Won, Kwang-deok Seo, and Jae-wook Lee</i> | 16 |
| Unsupervised Deep Learning Recommender System for Personal Computer Users <i>Daniel Shapiro, Hamza Qassoud, Mathieu Lemay, and Miodrag Bolic</i> | 22 |
| Modeling of Complex Multiagent Behaviour Using Matrix Representation <i>Sebastian Meszynski and Oleksandr Sokolov</i> | 32 |
| Dialog Management for Credit Card Selling via Finite State Machine Using Sentiment Classification in Turkish Language <i>Gizem Sogancioglu, Tolga Cekic, Bilge Koroglu, Mert Basmaci, and Onur Agin</i> | 38 |
| Developing Space Efficient Techniques for Building POMDP Based Intelligent Tutoring Systems <i>Fangju Wang</i> | 44 |
| Distributed Sensor Network for Noise Monitoring in Industrial Environment with Raspberry Pi <i>Natalia Blasco, Maria de Diego, Roman Belda, Ismael de Fez, Pau Arce, Francisco Jose Martinez-Zaldivar, Alberto Gonzalez, and Juan Carlos Guerri</i> | 51 |
| Intelligent Tools for Electrical Energy Domain in Smart City <i>Ary Mauricio Burbano, Antonio Martin, and Carlos Leon</i> | 56 |
| Bagged Fuzzy k-nearest Neighbors for Identifying Anomalous Propagation in Radar Images <i>Hansoo Lee, Jonggeun Kim, Suryo Adhi Wibowo, and Sungshin Kim</i> | 62 |
| Evaluation of Reference Model for Thermal Energy System Based on Machine Learning Algorithm <i>Minsung Kim and Young Soo Lee</i> | 68 |
| Human-Centric Internet of Things. Problems and Challenges <i>Ekaterina D. Kazimirova</i> | 72 |

| | |
|---|----|
| Life Cycle Agent, Beyond Intelligent Manufacturing <i>Leo van Moergestel, Erik Puik, Daniel Telgen, Feiko Wielsma, Geoffrey Mastenbroek, Robbin van den Berg, Arnoud den Haring, and John-Jules Meyer</i> | 75 |
| A Marketplace for Cyber-Physical Production Systems: Architecture and Key Enablers <i>Susana Aguiar, Rui Pinto, Joao Reis, and Gil Goncalves</i> | 81 |
| A New Approach in System Integration in Smart Grids <i>Juan Ignacio Guerrero Alonso, Enrique Personal, and Carlos Leon</i> | 87 |
| Data Analysis for Early Fault Detection - On-line monitoring approach for heat exchanger in solar-thermal plant <i>Javier M. Mora-Merchan, Enrique Personal, Antonio Parejo, Antonio Garcia, and Carlos Leon</i> | 93 |
| An Intelligent Help-Desk Framework for Effective Troubleshooting <i>Miguel Angel Leal Leal, Antonio Martin-Montes, Jorge Roper, Julio Barbancho, and Carlos Leon</i> | 98 |