

Table of Contents

Simple and Compact Indexing for Efficient KNN Search in High Dimensional Feature Space <i>Zaher Al Aghbari and Ayoub Al-Hamadi</i>	1
Automated Annotation of Text Using the Classification-based Annotation Workbench (CLAW) <i>R.oy George, Hema Nair, Khalil Shujaaee, David Krooks, and Chandler Armstrong</i>	6
Mining Incomplete Data with Many Missing Attribute Values A Comparison of Probabilistic and Rough Set Approaches <i>Patrick G. Clark, Jerzy W. Grzymala-Busse, and Martin Kuehnhausen</i>	12
Identification of Failing Banks Using Clustering with Self-Organising Neural Networks <i>Michael Negnevitsky</i>	18
A Formal Framework for Modeling Topological Relations of Spatial Ontologies <i>Sana Chaabane, Faiez Gargouri, and Wassim Jaziri</i>	23
Requirements and Matching Software Technologies for Sustainable and Agile Manufacturing Systems <i>Daniel Telgen, Leo van Moergestel, Erik Puik, Pascal Muller, and John-Jules Meyer</i>	30
Apriori-with-Constraint for Flexible Association Rule Discovery <i>Kittisak Kerdprasop, Phaichayon Kongchai, and Nittaya Kerdprasop</i>	36
Bayes Net Analysis to Support Database Design and Normalization <i>Nittaya Kerdprasop and Kittisak Kerdprasop</i>	42
Flexible Process Modeling Determined by Existing Human Expert Domain Knowledge Bases <i>Ingo Schwab, Melanie Senn, Susanne Fischer, and Norbert Link</i>	48
Content Adaptation for an Adaptive Hypermedia System <i>Marta Fernandes, Paulo Couto, Constantino Martins, and Luiz Faria</i>	54
Context Processing: A Distributed Approach <i>Penghe Chen, Shubhabrata Sen, Hung Keng Pung, and Wai Choong Wong</i>	58
N-Screen Service Platform based on Location-Awareness <i>Jiho Kim, Dohee Lee, and Ohyoung Song</i>	65
Extendable Dialog Script Description Language for Natural Language User Interfaces <i>Kiyoshi Nitta</i>	69

Classification of Three Negative Emotions based on Physiological Signals <i>Eun-Hye Jang, Byoun-Jun Park, Sang-Hyeob Kim, Myoung-Ae Chung, Mi-Sook Park, and Jin-Hun Sohn</i>	75
Physiological Signals and Classification for Happiness, Neural and Surprise Emotions <i>Eun-Hye Jang, Sang-Hyeob Kim, Chul Huh, and Myoung-Ae Chung</i>	79
Robot Control Using 2D Visual Information Via Database <i>Yutaka Maeda and Hidetaka Ito</i>	83
Incorporating Online Process Mining Based on Context Awareness into Human-Robot-Cooperation Framework <i>Stephan Puls, Benjamin Lotspeich, and Heinz Worn</i>	89
Step Climbing and Descending for a Manual Wheelchair with a Network Care Robot <i>Hikaru Kanda, Nobuyuki Yamashima, and Eiji Nakano</i>	95
On the Analysis of a Swarm-Intelligence Coordination Model for Swarm Robots <i>Caio D. D. Monteiro, Diego M. P. F. Silva, and Carmelo J. A. Bastos-Filho</i>	103
A Multi-Objective Particle Swarm Optimizer Based on Diversity <i>Dennis R. C. Silva and Carmelo J. A. Bastos-Filho</i>	109
A new Heuristic of Fish School Segregation for Multi-Solution Optimization of Multimodal Problems <i>Marcelo G. P. Lacerda and Fernando B. de L. Neto</i>	115
Intelligent Assertions Placement Scheme for String Search Algorithms <i>Ali Alakeel</i>	122
Modeling of Sales Forecasting in Retail Using Soft Computing Techniques <i>Luis Lobo-da-Costa, Susana Vieira, and Joao Sousa</i>	129
Transmission Network Expansion Planning under Uncertainty using the Conditional Value at Risk and Genetic Algorithms <i>Hugo Sardinha, Joao Sousa, Carlos Silva, Daniel Delgado, and Joao Claro</i>	135
General Framework for Context-Aware Recommendation of Social Events <i>Wolfgang Beer, Walter Hargassner, Sandor Herramhof, and Christian Derwein</i>	141
Collective Intelligent Management of Freight Trains' Flow <i>Boris Davydov</i>	147
Infomobility and Vehicle Routing Problem <i>Luigi Sanfilippo and Giuseppe Salvo</i>	153

Overcoming the Condorcets Border in Collective Intelligence Systems <i>Vladislav Protasov, Zinaida Potapova, and Eugene Melnikov</i>	161
Measurement and Calibration System of Arrow's Impact Point using High Speed Object Detecting Sensor <i>Yeongsang Jeong, Hansoo Lee, Jungwon Yu, and Sungshin Kim</i>	167
Vision-based Cattle Detection and Localization System in an RGB Color Space <i>Jieun Kim and Woo Young Jung</i>	173
Evaluation of Machine Learning Methods in a Rain Detection System for Partial Discharge Data Analysis <i>Leandro H. S. Silva, Sergio C Oliveira, and Eduardo Fontana</i>	176