Table of Contents

An ET-Based Low-Level Solution for Query-Answering Problems Kiyoshi Akama and Ekawit Nantajeewarawat	1
Incremental Rough Possibilistic K-Modes	13
Probabilistic Neural Network for the Automated Identification of the Harlequin Ladybird (Harmonia Axyridis)	25
Unifying Multi-level Business Process Discovered by Heuristic Miner Algorithm	36
User Distributions in N-Tier Platform with Effective Memory Reusability	50
Bat Algorithm, Genetic Algorithm and Shuffled Frog Leaping Algorithm for Designing Machine Layout	59
Hue Modeling for Object Tracking in Multiple Non-overlapping Cameras	69
Using HMMs and Depth Information for Signer-Independent Sign Language Recognition	79
Unscented Kalman Filter for Noisy Multivariate Financial Time-Series Data	87
Reconstructing Gene Regulatory Network Using Heterogeneous Biological Data	97

Design of a Multi-day Tour-and-Charging Scheduler for Electric Vehicles	108
Using a Normalized Score Centroid-Based Classifier to Classify Multi-label Herbal Formulae Verayuth Lertnattee, Sinthop Chomya, and Virach Sornlertlamvanich	119
On the Computation of Choquet Optimal Solutions in Multicriteria Decision Contexts	131
Test-Cost-Sensitive Attribute Reduction in Decision-Theoretic Rough Sets	143
Spatial Anisotropic Interpolation Approach for Text Removal from an Image	153
A Geometric Evaluation of Self-Organizing Map and Application to City Data Analysis	165
AOF-Based Algorithm for Dynamic Multi-Objective Distributed Constraint Optimization	175
Relational Change Pattern Mining Based on Modularity Difference Yoshiaki Okubo, Makoto Haraguchi, and Etsuji Tomita	187
Reasoning with Near Set-Based Digital Image Flow Graphs James F. Peters, Doungrat Chitcharoen, and Sheela Ramanna	199
An Efficient Interval-Based Approach to Mining Frequent Patterns in a Time Series Database	211
A Secure and Privacy-Aware Cloud-Based Architecture for Online Social Networks	223
A Hybrid Algorithm for Image Watermarking against Signal Processing Attacks	235
Hindi Word Sense Disambiguation Using Semantic Relatedness Measure	247

Table of Contents	XIII
A Content-Based eResource Recommender System to Augment eBook-Based Learning	257
Markov Decision Processes with Functional Rewards	2 69
Hand Gesture Segmentation from Complex Color-Texture Background Image	281
Distributed Query Plan Generation Using HBMO	293
Axiomatic Foundations of Generalized Qualitative Utility	305
Computing Semantic Association: Comparing Spreading Activation and Spectral Association for Ontology Learning	317
Evolution of Self-interested Agents: An Experimental Study	329
Author Index	341