Contents

Part I Intelligent Systems and Data Mining

Some Considerations in Multi-Source Data Fusion
Ronald R. Yager ................................................. 3

Granular Nested Causal Complexes
Lawrence J. Mazlack ........................................... 23

Gene Regulating Network Discovery
Yingjun Cao, Paul P. Wang and Alade Tokuta ................. 49

Semantic Relations and Information Discovery
D. Cai and C.J. van Rijsbergen ............................... 79

Sequential Pattern Mining
Tian-Rui Li, Yang Xu, Da Ruan and Wu-ming Pan ............... 103

Uncertain Knowledge Association
Through Information Gain
Athena Tocatlidou, Da Ruan, Spiros Th. Kaloidis and Nikos A. Lorentzos 123

Data Mining for Maximal Frequent Patterns
in Sequence Groups
J.W. Guan, D.A. Bell and D.Y. Liu ......................... 137

Mining Association Rules with Rough Sets
D.A. Bell, J.W. Guan and D.Y. Liu .......................... 163

The Evolution of the Concept of Fuzzy Measure
Luis Garmendia .................................................. 185
Part II Economic and Management Applications

Association Rule Based Specialization in ER Models
Martine De Cock, Chris Cornelis, Ming Ren, Guoqing Chen and Etienne E. Kerre .......................... 203

Discovering the Factors Affecting the Location Selection of FDI in China
Li Zhang, Yujie Zhu, Ying Liu, Nan Zhou and Guoqing Chen ........... 219

Penalty-Reward Analysis with Uninorms: A Study of Customer (Dis)Satisfaction
Koen Vanhoof, Pieter Pauwels, József Dombi, Tom Brijs and Geert Wets................................ 237

Using an Adapted Classification Based on Associations Algorithm in an Activity-Based Transportation System
Davy Janssens, Geert Wets, Tom Brijs and Koen Vanhoof ............... 253

Evolutionary Induction of Descriptive Rules in a Market Problem
M.J. del Jesus, P. González, F. Herrera and M. Mesonero ............... 267

Personalized Multi-Stage Decision Support in Reverse Logistics Management
Jie Lu and Guangquan Zhang ................................... 293

Part III Industrial Engineering Applications

Fuzzy Process Control with Intelligent Data Mining
Murat Gülbay and Cengiz Kahraman .......................... 315

Accelerating the New Product Introduction with Intelligent Data Mining
Gülçin Büyüközerkan and Orhan Feyzioğlu ....................... 337

Integrated Clustering Modeling with Backpropagation Neural Network for Efficient Customer Relationship Management
Tijen Ertay and Bora Çekiyay ................................. 355

Sensory Quality Management and Assessment: from Manufacturers to Consumers
Ludovic Koehl, Xiangyi Zeng, Bin Zhou and Yongsheng Ding ........... 375
Simulated Annealing Approach for the Multi-objective Facility Layout Problem
Umut R. Tuzkaya, Tijen Ertay and Da Ruan ......................... 401

Self-Tuning Fuzzy Rule Bases with Belief Structure
Jun Liu, Da Ruan, Jian-Bo Yang and Luis Martinez Lopez......... 419

A User Centred Approach to Management Decision Making
L.P. Maguire, T.A. McCloskey, P.K. Humphreys and R. McIvor ...... 439

Techniques to Improve Multi-Agent Systems for Searching and Mining the Web
E. Herrera-Viedma, C. Porcel, F. Herrera, L. Martínez and A.G. Lopez-Herrera .................................................. 463

Advanced Simulator Data Mining for Operators’ Performance Assessment
Anthony Spurgin and Gueorgui Petkov .............................. 487

Subject Index .......................................................... 515
Intelligent Data Mining
Techniques and Applications
Ruan, D.; Chen, G.-Q.; Kerre, E.E.; Wets, G. (Eds.)
2005, X, 518 p., Hardcover
ISBN: 978-3-540-26256-5