Table of Contents

Comparison of Linear Discriminant Functions by K-fold Cross Validation Shuichi Shinmura	1
Use of Social Microblogging to Motivate Young People (NEETs) to Participate in Distance Education Through www.eBig3.eu" Dace Ratniece	7
Circadian Patterns in Twitter Marijn ten Thij, Sandjai Bhulai, and Peter Kampstra	12
Enhancement of Trajectory Ontology Inference Over Domain and Temporal Rules Rouaa Wannous, Jamal Malki, Alain Bouju, and Cecile Vincent	18
An Annotation Process for Data Visualization Techniques Geraldo Franciscani Jr., Rodrygo L. T. Santos, Raphael Ottoni, Joao Paulo Pesce, Wagner Meira Jr., and Raquel Melo-Minardi	24
Prediction Model Framework for Imbalanced Datasets Maria Rossana de Leon and Eugene Rex Jalao	33
A Study of VEPSO Approaches for Multiobjective Real World Applications Omar Andres Carmona Cortes, Andrew Rau-Chaplin, Duane Wilson, and Jurgen Gaiser-Porter	42
Application of Change-Point Detection in Image Retrieval Dongwei Wei, Yuehua Wu, and Xiaoping Shi	49
Co-movement of European Stock Markets based on Association Rule Mining Youqin Pan, Yong Hu, Elizabeth Haran, and Saverio Manago	54
A Method for Measuring Similarity of Simulation Time-Series Data Based on Dynamic Time Warping Ping Ma, Zhong Zhang, Kaibin Zhao, and Yuning Li	59
Validation of Simulation Model based on Combined Consistency Analysis of Data and Feature Ming Yang, Wei Li, Lingyun Lu, and Song Jiao	65
Early Detection of Critical Faults Using Time-Series Analysis on Heterogeneous Information Systems in the Automotive Industry Thomas Leitner, Christina Feilmayr, and Wolfram Woess	70
GeoTagView: Visualizing Geographic Tags Easily Gianpaolo Pigliasco and Gaetano Zazzaro	76

Document Identification with MapReduce Framework Yenumula Reddy	81
The Economic Benefits of Allocating Spectrum for Mobile Broadband in Korea Jae hyouk Jahng	87
Statistical Uncertainty of Market Network Structures Petr Koldanov, Panos M. Pardalos, and Victor Zamaraev	91
Scalable System for Textual Analysis of Stock Market Prediction Roy Guanyu Lin and Tzu-Chieh Tsai	95
Evolutionary Clustering Analysis of Multiple Edge Set Networks used for Modeling Ivory Coast Mobile Phone Data and Sensemaking Daniel B. Rajchwald and Thomas J. Klemas	100
Property Preservation in Reduction of Data Volume for Mining: A Neighborhood System Approach Ray Hashemi, Azita Bahrami, Nicholas Tyler, Matthew Antonelli, and Bryan Dahlqvist	105
A Decision Support Approach for Quality Management based on Artificial Intelligence Applications Nafissa Yussupova, Maxim Boyko, Diana Bogdanova, and Andreas Hilbert	112
WLBench: A Benchmark for WebLog Data Ahmad Ghazal, Alain Crolotte, and Mohammed Al-Kateb	122
Comparative Analysis of Data Structures for Approximate Nearest Neighbor Search Alexander Ponomarenko, Nikita Avrelin, Bilegsaikhan Naidan, and Leonid Boytsov	125
A Novel Privacy Preserving Association Rule Mining using Hadoop Kangsoo Jung, Sehwa Park, Sungyong Cho, and Seog Park	131