## **Table of Contents**

Negation Identification and Calculation in Sentiment Analysis  Amna Asmi and Tanko Ishaya	1
Applying of Sentiment Analysis for Texts in Russian Based on Machine Learning Approach Nafissa Yussupova, Diana Bogdanova, and Maxim Boyko	8
A Novel Dependability Model to Define Normal Network Behavior  Maher Salem and Ulrich Buehler	15
Semantic Description of Text Mining Services  Katja Pfeifer and Alexander Schill	21
Semantic Tools for Forensics: A Highly Adaptable Framework  Michael Spranger, Stefan Schildbach, Florian Heinke, Steffen Grunert, and Dirk Labudde	27
Particular Requirements on Opinion Mining for the Insurance Business Sven Rill, Johannes Drescher, Dirk Reinel, Jorg Scheidt, and Florian Wogenstein	32
How to Support Prediction of Amyloidogenic Regions - The Use of a GA-Based Wrapper Feature Selections Olgierd Unold	37
Application of Optimisation-Based Data Mining Techniques to Medical Data Sets: A Comparative Analysis Zari Dzalilov, Adil Bagirov, and Musa Mammadov	41
Network Monitoring Method Based on Self-learning and Multi-dimensional Analysis  Isao Shimokawa and Toshiaki Tarui	47
Structure Learning of Bayesian Networks Using a New Unrestricted Dependency Algorithm Sona Taheri and Musa Mammadov	54
Comparison of Different Calculations of the Density-Based Local Outlier Factor Vanda Vintrova, Tomas Vintr, and Hana Rezankova	60
Data Mining Application for Anti-Crisis Management Nafisa Yusupova and Gyuzel Shakhmametova	68
Oracle NoSQL Database - Scalable, Transactional Key-value Store Ashok Joshi, Sam Haradhvala, and Charles Lamb	75
Efficient Extraction of Motion Flow Data From a Repository of Three-Dimensional Trajectories Using Bi-	79

Dimensional Indexes  Antonio d'Acierno, Marco Leone, Alessia Saggese, and Mario Vento	
On Biometric Verification of a User by Means of Eye Movement Data Mining Youming Zhang and Martti Juhola	85
Extracting Transportation Information and Traffic Problems From Tweets During a Disaster Aya Ishino, Shuhei Odawara, Hidetsugu Nanba, and Toshiyuki Takezawa	91
Classification of Time-Interval and Hybrid Sequential Temporal Patterns  Mohammed AL Zamil	97
Optimized Class Association Rule Mining using Genetic Network Programming with Automatic Termination Eloy Gonzales, Bun Theang Ong, and Koji Zettsu	102
Information Mining Over Significant Interval on Historical Data: A Study on World Major Indexes Kwan-Hua Sim	108
A Fast Short Read Alignment Algorithm Using Histogram-Based Features Qiu Chen, Koji Kotani, Feifei Lee, and Tadahiro Ohmi	114
AgileKDD An Agile Knowledge Discovery in Databases Process Model  Givanildo Nascimento and Adicineia Oliveira	118
An Improved Face Recognition Algorithm Using Adjacent Pixel Intensity Difference Quantization Histogram and Markov Stationary Feature  Feifei Lee, Koji Kotani, Qiu Chen, and Tadahiro Ohmi	123
Music Recommendation Based on Text Mining Ziwon Hyung, MyoungA Lee, and Kyogu Lee	129
Automated Reference Model Generation and Utilization for Dimensional Control of Large Scale Assemblies and Assembly Processes  Teuvo Heimonen and Markku Manninen	135
ListCreator: Entity Ranking on the Web  Alexandros Komninos and Avi Arampatzis	141
Parallel Processing of Very Many Textual Customers' Reviews Freely Written Down in Natural Languages  Jan Zizka and Frantisek Darena	147
A New Algorithm for Accurate Histogram Construction  Zeineb Dhouioui, Wissem Labbadi, and Jalel Akaichi	154