

Contents

Data Stream Mining

Adaptive Ensembles for Evolving Data Streams – Combining Block-Based and Online Solutions	3
<i>Jerzy Stefanowski</i>	
Comparison of Tree-Based Methods for Multi-target Regression on Data Streams	17
<i>Aljaž Osojnik, Panče Panov, and Sašo Džeroski</i>	
Frequent Itemsets Mining in Data Streams Using Reconfigurable Hardware . . .	32
<i>Lázaro Bustio, René Cumplido, Raudel Hernández, José M. Bande, and Claudia Feregrino</i>	
Discovering and Tracking Organizational Structures in Event Logs	46
<i>Annalisa Appice, Marco Di Pietro, Claudio Greco, and Donato Malerba</i>	
Intelligent Adaptive Ensembles for Data Stream Mining: A High Return on Investment Approach	61
<i>M. Kehinde Olorunnimbe, Herna L. Viktor, and Eric Paquet</i>	
Mining Periodic Changes in Complex Dynamic Data Through Relational Pattern Discovery	76
<i>Corrado Loglisci and Donato Malerba</i>	

Classification

The Usefulness of Roughly Balanced Bagging for Complex and High-Dimensional Imbalanced Data.	93
<i>Mateusz Lango and Jerzy Stefanowski</i>	
Classifying Traces of Event Logs on the Basis of Security Risks	108
<i>Bettina Fazzinga, Sergio Flesca, Filippo Furfaro, and Luigi Pontieri</i>	
Redescription Mining with Multi-target Predictive Clustering Trees.	125
<i>Matej Mihelčić, Sašo Džeroski, Nada Lavrač, and Tomislav Šmuc</i>	

Mining Complex Data

Generalizing Patterns for Cross-Domain Analogy	147
<i>Fabio Leuzzi and Stefano Ferilli</i>	

Spectral Features for Audio Based Vehicle Identification	163
<i>Alicja Wiczorkowska, Elżbieta Kubera, Tomasz Słowik, and Krzysztof Skrzypiec</i>	
Probabilistic Frequent Subtree Kernels	179
<i>Pascal Welke, Tamás Horváth, and Stefan Wrobel</i>	
Heterogeneous Network Decomposition and Weighting with Text Mining Heuristics	194
<i>Jan Kralj, Marko Robnik-Šikonja, and Nada Lavrač</i>	
Sequences	
Semi-supervised Multivariate Sequential Pattern Mining.	211
<i>Zhao Xu, Koichi Funaya, Haifeng Chen, and Sergio Leoni</i>	
Evaluating a Simple String Representation for Intra-day Foreign Exchange Prediction	224
<i>Simon Cousins and Blaž Žličar</i>	
Author Index	239



<http://www.springer.com/978-3-319-39314-8>

New Frontiers in Mining Complex Patterns
4th International Workshop, NFMCP 2015, Held in
Conjunction with ECML-PKDD 2015, Porto, Portugal,
September 7, 2015, Revised Selected Papers
Ceci, M.; Loglisci, C.; Manco, G.; Masciari, E.; Ras, Z.W.
(Eds.)
2016, X, 239 p. 57 illus., Softcover
ISBN: 978-3-319-39314-8