

# Contents

Resolution Transfer in Cancer Classification Based on Amplification Patterns. . . . .	1
<i>Prem Raj Adhikari and Jaakko Hollmén</i>	
Very Short-Term Wind Speed Forecasting Using Spatio-Temporal Lazy Learning . . . . .	9
<i>Annalisa Appice, Sonja Pravilovic, Antonietta Lanza, and Donato Malerba</i>	
Discovery of Parameters for Animation of Midge Swarms . . . . .	17
<i>Judith Bjorndahl, Ashley Herman, Richard Hamilton, Howard J. Hamilton, and Mark Brigham</i>	
No Sentiment is an Island: Sentiment Classification on Medical Forums . . . .	25
<i>Victoria Bobicev and Marina Sokolova</i>	
Active Learning for Classifying Template Matches in Historical Maps. . . . .	33
<i>Benedikt Budig and Thomas C. van Dijk</i>	
An Evaluation of Score Descriptors Combined with Non-linear Models of Expressive Dynamics in Music . . . . .	48
<i>Carlos Eduardo Cancino Chacón and Maarten Grachten</i>	
Geo-Coordinated Parallel Coordinates (GCPC): A Case Study of Environmental Data Analysis . . . . .	63
<i>Maha El Meseery and Orland Hoeber</i>	
Generalized Shortest Path Kernel on Graphs. . . . .	78
<i>Linus Hermansson, Fredrik D. Johansson, and Osamu Watanabe</i>	
Ensembles of Extremely Randomized Trees for Multi-target Regression. . . . .	86
<i>Dragi Kocev and Michelangelo Ceci</i>	
Clustering-Based Optimised Probabilistic Active Learning (COPAL). . . . .	101
<i>Georg Kreml, Tuan Cuong Ha, and Myra Spiliopoulou</i>	
Predictive Analysis on Tracking Emails for Targeted Marketing . . . . .	116
<i>Xiao Luo, Revanth Nadanasabapathy, A. Nur Zincir-Heywood, Keith Gallant, and Janith Peduruge</i>	
Semi-supervised Learning for Stream Recommender Systems . . . . .	131
<i>Pawel Matuszyk and Myra Spiliopoulou</i>	

Detecting Transmembrane Proteins Using Decision Trees. . . . .	146
<i>Mohammad Hossein Nikravan, Ashwani Kumar, and Sandra Zilles</i>	
Change Point Detection for Information Diffusion Tree . . . . .	161
<i>Kouzou Ohara, Kazumi Saito, Masahiro Kimura, and Hiroshi Motoda</i>	
Multi-label Classification via Multi-target Regression on Data Streams . . . . .	170
<i>Aljaž Osojnik, Panče Panov, and Sašo Džeroski</i>	
Periodical Skeletonization for Partially Periodic Pattern Mining . . . . .	186
<i>Keisuke Otaki and Akihiro Yamamoto</i>	
Predicting Drugs Adverse Side-Effects Using a Recommender-System. . . . .	201
<i>Diogo Pinto, Pedro Costa, Rui Camacho, and Vítor Santos Costa</i>	
Dr. Inventor Framework: Extracting Structured Information from Scientific Publications . . . . .	209
<i>Francesco Ronzano and Horacio Saggion</i>	
Predicting Protein Function and Protein-Ligand Interaction with the 3D Neighborhood Kernel. . . . .	221
<i>Leander Schietgat, Thomas Fannes, and Jan Ramon</i>	
Hierarchical Multidimensional Classification of Web Documents with MultiWebClass . . . . .	236
<i>Francesco Serafino, Gianvito Pio, Michelangelo Ceci, and Donato Malerba</i>	
Evaluating the Effectiveness of Hashtags as Predictors of the Sentiment of Tweets. . . . .	251
<i>Credell Simeon and Robert Hilderman</i>	
On the Feasibility of Discovering Meta-Patterns from a Data Ensemble . . . . .	266
<i>Einoshin Suzuki</i>	
An Algorithm for Influence Maximization in a Two-Terminal Series Parallel Graph and its Application to a Real Network . . . . .	275
<i>Koji Tabata, Atsuyoshi Nakamura, and Mineichi Kudo</i>	
Benchmarking Stream Clustering for Churn Detection in Dynamic Networks . . . . .	284
<i>Serdar Baran Tatar, Andrew McIntyre, Nur Zincir-Heywood, and Malcolm Heywood</i>	
Canonical Correlation Methods for Exploring Microbe-Environment Interactions in Deep Subsurface . . . . .	299
<i>Viivi Uurtio, Malin Bomberg, Kristian Nybo, Merja Itävaara, and Juho Rousu</i>	

KeCo: Kernel-Based Online Co-agreement Algorithm . . . . .	308
<i>Laurens Wiel, Tom Heskes, and Evgeni Levin</i>	
Tree PCA for Extracting Dominant Substructures from Labeled Rooted Trees . . . . .	316
<i>Tomoya Yamazaki, Akihiro Yamamoto, and Tetsuji Kuboyama</i>	
Enumerating Maximal Clique Sets with Pseudo-Clique Constraint. . . . .	324
<i>Hongjie Zhai, Makoto Haraguchi, Yoshiaki Okubo, and Etsuji Tomita</i>	
<b>Author Index</b> . . . . .	341

Discovery Science

18th International Conference, DS 2015, Banff, AB,  
Canada, October 4-6, 2015. Proceedings

Japkowicz, N.; Matwin, S. (Eds.)

2015, XV, 342 p. 96 illus. in color., Softcover

ISBN: 978-3-319-24281-1