

Table of Contents – Part I

Opinion Mining

Mining E-Commerce Feedback Comments for Dimension Rating Profiles	1
<i>Lishan Cui, Xiuzhen Zhang, Yan Wang, and Lifang Wu</i>	
Generating Domain-Specific Sentiment Lexicons for Opinion Mining	13
<i>Zaher Salah, Frans Coenen, and Davide Grossi</i>	
Effective Comment Sentence Recognition for Feature-Based Opinion Mining	25
<i>Hui Song, Botian Yang, and Xiaoqiang Liu</i>	
Exploiting Co-occurrence Opinion Words for Semi-supervised Sentiment Classification	36
<i>Suke Li, Jinmei Hao, Yanbing Jiang, and Qi Jing</i>	

Behavior Mining

<i>HN-Sim</i> : A Structural Similarity Measure over Object-Behavior Networks	48
<i>Jiazheng Nian, Shanshan Wang, and Yan Zhang</i>	
Community Based User Behavior Analysis on Daily Mobile Internet Usage	60
<i>Jamal Yousaf, Juanzi Li, and Yuanchao Ma</i>	

Stream Mining

Tracking Drift Types in Changing Data Streams	72
<i>David Tse Jung Huang, Yun Sing Koh, Gillian Dobbie, and Russel Pears</i>	
Continuously Extracting High-Quality Representative Set from Massive Data Streams	84
<i>Xiaokang Ji, Xiuli Ma, Ting Huang, and Shiwei Tang</i>	
Change Itemset Mining in Data Streams	97
<i>Minmin Zhang, Gillian Dobbie, and Yun Sing Koh</i>	

Sequential Data Mining

TKS: Efficient Mining of Top-K Sequential Patterns	109
<i>Philippe Fournier-Viger, Antonio Gomariz, Ted Gueniche, Espérance Mwamikazi, and Rincy Thomas</i>	
When Optimization Is Just an Illusion	121
<i>Muhammad Marwan Muhammad Fuad</i>	
Accurate and Fast Dynamic Time Warping	133
<i>Hailin Li and Libin Yang</i>	
Online Detecting Spreading Events with the Spatio-temporal Relationship in Water Distribution Networks	145
<i>Ting Huang, Xiuli Ma, Xiaokang Ji, and Shiwei Tang</i>	
MLSP: Mining Hierarchically-Closed Multi-Level Sequential Patterns	157
<i>Michal Šebek, Martin Hłosta, Jaroslav Zendulka, and Tomáš Hruška</i>	
Mining Maximal Sequential Patterns without Candidate Maintenance	169
<i>Philippe Fournier-Viger, Cheng-Wei Wu, and Vincent S. Tseng</i>	

Web Mining

Improved Slope One Collaborative Filtering Predictor Using Fuzzy Clustering	181
<i>Tianyi Liang, Jiancong Fan, Jianli Zhao, Yongquan Liang, and Yujun Li</i>	
Towards Building Virtual Vocabularies in the Semantic Web	193
<i>Yunqing Wen, Xiang Zhang, Kai Shen, and Peng Wang</i>	
Web Mining Accelerated with In-Memory and Column Store Technology	205
<i>Patrick Hennig, Philipp Berger, and Christoph Meinel</i>	

Image Mining

Constructing a Novel Pos-neg Manifold for Global-Based Image Classification	217
<i>Rong Zhu, Jianhua Yang, Yonggang Li, and Jie Xu</i>	
3-D MRI Brain Scan Feature Classification Using an Oct-Tree Representation	229
<i>Akadej Udomchaiporn, Frans Coenen, Marta García-Fiñana, and Vanessa Sluming</i>	

Biometric Template Protection Based on Biometric Certificate and Fuzzy Fingerprint Vault	241
<i>Weihong Wang, Youbing Lu, and Zhaolin Fang</i>	
A Comparative Study of Three Image Representations for Population Estimation Mining Using Remote Sensing Imagery	253
<i>Kwankamon Dittakan, Frans Coenen, Rob Christley, and Maya Wardeh</i>	
Mixed-Norm Regression for Visual Classification	265
<i>Xiaofeng Zhu, Jilian Zhang, and Shichao Zhang</i>	
Research on Map Matching Based on Hidden Markov Model	277
<i>Jinhui Nie, Hongqi Su, and Xiaohua Zhou</i>	
Text Mining	
A Rule-Based Named-Entity Recognition for Malay Articles	288
<i>Rayner Alfred, Leow Ching Leong, Chin Kim On, Patricia Anthony, Tan Soo Fun, Mohd Norhisham Bin Razali, and Mohd Hanafi Ahmad Hijazi</i>	
Small Is Powerful! Towards a Refinedly Enriched Ontology by Careful Pruning and Trimming	300
<i>Shan Jiang, Jiazen Nian, Shi Zhao, and Yan Zhang</i>	
Refine the Corpora Based on Document Manifold	313
<i>Chengwei Yao, Yilin Wang, and Gencai Chen</i>	
Social Network Mining	
Online Friends Recommendation Based on Geographic Trajectories and Social Relations	323
<i>Shi Feng, Dajun Huang, Kaisong Song, and Daling Wang</i>	
The Spontaneous Behavior in Extreme Events: A Clustering-Based Quantitative Analysis	336
<i>Ning Shi, Chao Gao, Zili Zhang, Lu Zhong, and Jiajin Huang</i>	
Restoring: A Greedy Heuristic Approach Based on Neighborhood for Correlation Clustering	348
<i>Ning Wang and Jie Li</i>	
A Local Greedy Search Method for Detecting Community Structure in Weighted Social Networks	360
<i>Bin Liu and Tieyun Qian</i>	

Tree-Based Mining for Discovering Patterns of Reposting Behavior in Microblog	372
<i>Huilei He, Zhiwen Yu, Bin Guo, Xinjiang Lu, and Jilei Tian</i>	
An Improved Parallel Hybrid Seed Expansion (PHSE) Method for Detecting Highly Overlapping Communities in Social Networks	385
<i>Ting Wang, Xu Qian, and Hui Xu</i>	
A Simple Integration of Social Relationship and Text Data for Identifying Potential Customers in Microblogging	397
<i>Guansong Pang, Shengyi Jiang, and Dongyi Chen</i>	
An Energy Model for Network Community Structure Detection	410
<i>Yin Pang and Kan Li</i>	
A Label Propagation-Based Algorithm for Community Discovery in Online Social Networks	422
<i>Yitong Wang, Yurong Zhao, Zhuoxiang Zhao, and Zhicheng Liao</i>	
Mining Twitter Data for Potential Drug Effects	434
<i>Keyuan Jiang and Yujing Zheng</i>	
Social-Correlation Based Mutual Reinforcement for Short Text Classification and User Interest Tagging	444
<i>Rong Li and Ya Zhang</i>	

Classification

Graph Based Feature Augmentation for Short and Sparse Text Classification	456
<i>Guodong Long and Jing Jiang</i>	
Exploring Deep Belief Nets to Detect and Categorize Chinese Entities	468
<i>Yu Chen, Dequan Zheng, and Tiejun Zhao</i>	
Extracting Novel Features for E-Commerce Page Quality Classification	481
<i>Jing Wang, Lanfen Lin, Feng Wang, Penghua Yu, Jiaolong Liu, and Xiaowei Zhu</i>	
Hierarchical Classification for Solving Multi-class Problems: A New Approach Using Naive Bayesian Classification	493
<i>Esra'a Alshdaifat, Frans Coenen, and Keith Dures</i>	
Predicting Features in Complex 3D Surfaces Using a Point Series Representation: A Case Study in Sheet Metal Forming	505
<i>Subhieh El-Salhi, Frans Coenen, Clare Dixon, and Muhammad Sulaiman Khan</i>	

Automatic Labeling of Forums Using Bloom's Taxonomy	517
<i>Vanessa Echeverría, Juan Carlos Gomez, and Marie-Francine Moens</i>	
Classifying Papers from Different Computer Science Conferences	529
<i>Yaakov HaCohen-Kerner, Avi Rosenfeld, Maor Tzidkani, and Daniel Nisim Cohen</i>	
Vertex Unique Labelled Subgraph Mining for Vertex Label Classification	542
<i>Wen Yu, Frans Coenen, Michele Zito, and Subhieh El Sahlí</i>	
A Similarity-Based Grouping Method for Molecular Docking in Distributed System	554
<i>Ruisheng Zhang, Guangcai Liu, Rongjing Hu, Jiaxuan Wei, and Juan Li</i>	
A Bag-of-Tones Model with MFCC Features for Musical Genre Classification	564
<i>Zengehang Qin, Wei Liu, and Tao Wan</i>	
The GEPSO-Classification Algorithm	576
<i>Weihong Wang, Dandan Jin, Qu Li, Zhaolin Fang, and Jie Yang</i>	
Author Index	585