Contents

Text Mining and Document Analysis

Learning Sparse Overcomplete Word Vectors Without Intermediate Dense Representations .................................................. 3
  Yunchuan Chen, Ge Li, and Zhi Jin

A Study of Distributed Semantic Representations for Automated Essay Scoring .............................................................. 16
  Cancan Jin, Ben He, and Jungang Xu

Weakly Supervised Feature Compression Based Topic Model for Sentiment Classification .................................................. 29
  Yan Hu, Xiaofei Xu, and Li Li

An Effective Gated and Attention-Based Neural Network Model for Fine-Grained Financial Target-Dependent Sentiment Analysis ............................................................... 42
  Mengxiao Jiang, Jianxiang Wang, Man Lan, and Yuanbin Wu

A Hidden Astroturfing Detection Approach Base on Emotion Analysis ................................................................................. 55
  Tong Chen, Noora Hashim Alallaq, Wenjia Niu, Yingdi Wang, Xiaoxuan Bai, Jingjing Liu, Yingxiao Xiang, Tong Wu, and Jiqiang Liu

Leveraging Term Co-occurrence Distance and Strong Classification Features for Short Text Feature Selection .................................................. 67
  Huifang Ma, Yuying Xing, Shuang Wang, and Miao Li

Formal Semantics and Fuzzy Logic

A Fuzzy Logic Based Policy Negotiation Model .................................................. 79
  Jieyu Zhan, Xudong Luo, Yuncheng Jiang, Wenjun Ma, and Mukun Cao

f-ALC(D)-LTL: A Fuzzy Spatio-Temporal Description Logic .................................................. 93
  Haitao Cheng and Zongmin Ma

R-Calculus for the Primitive Statements in Description Logic ALC ................................................................................. 106
  Yuhui Wang, Cungen Cao, and Yuefei Sui

A Multi-objective Attribute Reduction Method in Decision-Theoretic Rough Set Model .................................................. 117
  Lu Wang, Weiwei Li, Xiuyi Jia, and Bing Zhou
A Behavior-Based Method for Distinction of Flooding DDoS and Flash Crowds

Degang Sun, Kun Yang, Zhixin Shi, and Bin Lv

Knowledge Management

Na Pang, Dali Zhu, Kaiwen Xue, Wenjing Rong, Yinlong Liu, and Changhai Ou

Improved Knowledge Base Completion by the Path-Augmented TransR Model
Wenhao Huang, Ge Li, and Zhi Jin

Balancing Between Cognitive and Semantic Acceptability of Arguments
Hiroyuki Kido and Keishi Okamoto

Discovery of Jump Breaks in Joint Volatility for Volume and Price of High-Frequency Trading Data in China
Xiao-Wei Ai, Tianming Hu, Gong-Ping Bi, Cheng-Feng Lei, and Hui Xiong

Device-Free Intruder Sensing Leveraging Fine-Grained Physical Layer Signatures
Dali Zhu, Na Pang, Weimiao Feng, Muhammad Al-Khiza‘ay, and Yuchen Ma

Understanding Knowledge Management in Agile Software Development Practice
Yanti Andriyani, Rashina Hoda, and Robert Amor

Knowledge Integration

Multi-view Unit Intact Space Learning
Kun-Yu Lin, Chang-Dong Wang, Yu-Qin Meng, and Zhi-Lin Zhao

A Novel Blemish Detection Algorithm for Camera Quality Testing
Kun Wang, Kwok-Wai Hung, and Jianmin Jiang

Learning to Infer API Mappings from API Documents
Yangyang Lu, Ge Li, Zelong Zhao, Linfeng Wen, and Zhi Jin

Super-Resolution for Images with Barrel Lens Distortions
Mei Su, Kwok-Wai Hung, and Jianmin Jiang
Knowledge Retrieval

Mining Schema Knowledge from Linked Data on the Web .......................... 261
  Razieh Mehri and Petko Valtchev

Inferring User Profiles in Online Social Networks Based on Convolutional
  Neural Network ................................................................. 274
  Xiaoxue Li, Yanan Cao, Yanmin Shang, Yanbing Liu, Jianlong Tan,
  and Li Guo

Co-saliency Detection Based on Superpixel Clustering ............................... 287
  Guiqian Zhu, Yi Ji, Xianjin Jiang, Zenan Xu, and Chumping Liu

ARMICA-Improved: A New Approach for Association Rule Mining ............. 296
  Shahpar Yakhchi, Seyed Mohssen Ghafari, Christos Tjortjis,
  and Mahdi Fazeli

Recommendation Algorithms and Systems

Collaborative Filtering via Different Preference Structures .................... 309
  Shaowu Liu, Na Pang, Guandong Xu, and Huan Liu

A Multifaceted Model for Cross Domain Recommendation Systems .............. 322
  Jianxun Lian, Fuzheng Zhang, Xing Xie, and Guangzhong Sun

Cross Domain Collaborative Filtering by Integrating User Latent Vectors
  of Auxiliary Domains .................................................................. 334
  Xu Yu, Feng Jiang, Miao Yu, and Ying Guo

Collaborative Filtering Based on Pairwise User-Item Blocking Structure
  (PBCF): A General Framework and Its Implementation ........................ 346
  Fengjuan Zhang, Jianjun Wu, Jianzhao Qin, Xing Liu,
  and Yongqiang Wang

Beyond the Aggregation of Its Members—A Novel Group Recommender
  System from the Perspective of Preference Distribution ........................ 359
  Zhiwei Guo, Chaowei Tang, Wenjia Niu, Yunqing Fu, Haiyang Xia,
  and Hui Tang

Exploring Latent Bundles from Social Behaviors for Personalized Ranking .... 371
  Wenli Yu, Li Li, Fan Li, Jinjing Zhang, and Fei Hu

Trust-Aware Recommendation in Social Networks .................................... 380
  Yingyuan Xiao, Zhongjing Bu, Ching-Hsien Hsu, Wenxin Zhu,
  and Yan Shen
Connecting Factorization and Distance Metric Learning for Social Recommendations .......................... 389
  Junliang Yu, Min Gao, Yuqi Song, Zehua Zhao, Wenge Rong, and Qingyu Xiong

Knowledge Engineering

Relevant Fact Selection for QA via Sequence Labeling ......................... 399
  Yuzhi Liang, Jia Zhu, Yupeng Li, Min Yang, and Siu Ming Yiu

Community Outlier Based Fraudster Detection ................................. 410
  Chenfei Sun, Qingzhong Li, Hui Li, Shidong Zhang, and Yongqing Zheng

An Efficient Three-Dimensional Reconstruction Approach for Pose-Invariant Face Recognition Based on a Single View .................. 422
  Minghua Zhao, Ruiyang Mo, Yonggang Zhao, Zhenghao Shi, and Feifei Zhang

MIAC: A Mobility Intention Auto-Completion Model for Location Prediction .............................................. 432
  Feng Yi, Zhi Li, Hongtao Wang, Weimin Zheng, and Limin Sun

Automatically Difficulty Grading Method Based on Knowledge Tree .... 445
  Jin Zhang, Chengcheng Liu, Haoxiang Yang, Fan Feng, and Xiaoli Gong

A Weighted Non-monotonic Averaging Image Reduction Algorithm ....... 458
  Jiaxin Han and Haiyang Xia

Knowledge Representation and Reasoning

Learning Deep and Shallow Features for Human Activity Recognition .. 469
  Sadiq Sani, Stewart Massie, Nirmalie Wiratunga, and Kay Cooper

Transfer Learning with Manifold Regularized Convolutional Neural Network .................................................. 483
  Fuzhen Zhuang, Lang Huang, Jia He, Jixin Ma, and Qing He

Learning Path Generation Method Based on Migration Between Concepts .. 495
  Dan Liu, Libo Zhang, Tiejian Luo, and Yanjun Wu

Representation Learning of Multiword Expressions with Compositionality Constraint ...................................... 507
  Minglei Li, Qin Lu, and Yunfei Long
Linear Algebraic Characterization of Logic Programs .................................................. 520
  Chiaki Sakama, Katsumi Inoue, and Taisuke Sato

Representation Learning with Entity Topics for Knowledge Graphs ........................ 534
  Xin Ouyang, Yan Yang, Liang He, Qin Chen, and Jiacheng Zhang

Robust Mapping Learning for Multi-view Multi-label Classification with Missing Labels ................................................................. 543
  Weijieying Ren, Lei Zhang, Bo Jiang, Zhefeng Wang, Guangming Guo, and Guiquan Liu

Fast Subsumption Between Rooted Labeled Trees ................................................. 552
  Olivier Carloni

Author Index ........................................................................................................... 561
Knowledge Science, Engineering and Management
10th International Conference, KSEM 2017, Melbourne, VIC, Australia, August 19-20, 2017, Proceedings
Li, G.; Ge, Y.; Zhang, Z.; Jin, Z.; Blumenstein, M. (Eds.)
2017, XVII, 563 p. 150 illus., Softcover
ISBN: 978-3-319-63557-6