

2016 International Conference on Behavioral, Economic and Socio-cultural Computing (BESC 2016)

**Durham, North Carolina, USA
11 – 13 November 2016**



**IEEE Catalog Number: CFP16BES-POD
ISBN: 978-1-5090-6165-5**

**Copyright © 2016 by the Institute of Electrical and Electronics Engineers, Inc
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

******This publication is a representation of what appears in the IEEE Digital Libraries. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP16BES-POD
ISBN (Print-On-Demand):	978-1-5090-6165-5
ISBN (Online):	978-1-5090-6164-8

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

Contents

Invited Papers	1
Jianbo Gao, Matthew L.Jockers, John Laudun. A multiscale theory for sentiment variation in novels	1
Yuan Sun, Shiwei Ye, Guiping Su, Yi Sun. Q-matrix Learning and DINA Model Parameter Estimation	5
Hongwei Yin. Research on Influence of Chinese Urbanization on Hotel Industry Development	11
Social Computing and Applications	17
Chris Kuhlman, Gizem Korkmaz and Fernando Vega-Redondo. Can Social Contagion Spread Without Key Players?	17
Somayyeh Aghababaei, Eren Gultepe, Masoud Makrehchi and Iuliia Chepurna. Activity-Based Sampling of Twitter Users for Temporal Prediction Models.....	23
Somayyeh Aghababaei and Masoud Makrehchi. Interpolative Self-training Approach for Sentiment Analysis.....	29
Naiyue Chen, Yun Liu, Junjun Cheng and Qing Liu. Parallelizing Label Propagation for Overlapping Community Detection.....	35
Yu Liu, Bin Wu, Yunlei Zhang and Bai Wang. Overlapping Community Detection via Self-constrained Symmetric Non-negative Matrix Factorization ..	42
Weiguang Qu, Rubing Dai, Taizhong Wu, Min Gu, Yanhui Gu and Junsheng Zhou. Research on Interpretation of Norminal Compound.....	48
Hao Chen, Yinghong Dong and Kaisheng Lai. Revisit Hemline Index Theory: Forecasting Daily Trading of Short Skirts by Stock Market in China.....	54
Sherif Abdelhamid, Chris Kuhlman, Madhav Marathe and S. S. Ravi. Interactive Exploration and Understanding of Contagion Dynamics in Networked Populations	60
Zhicheng Liu, Jinbin Yu, Weiting Xiong, Jian Lu, Junyan Yang and Qiao Wang. Using Mobile Phone Data to Explore Spatial-Temporal Evolution of Home-Based Daily Mobility Patterns in Shanghai.....	66
Frank Jiang, Jin Gan, Yuanyuan Xu and Guandong Xu. Coupled Behavioral Analysis for User Preference-based Email Spamming.....	72
Weilan Luo. Human motion retargeting with trajectory constraints.....	7

Behavioral and Economic Computing79

- Jie Zhang, Lin Li, Ge Zhu, Xiangfu Meng and Qing Xie. A Comparison Study of Semi-supervised SVM Algorithms for Small Business Credit Prediction79
- German Creamer. Trading Network and Systemic Risk in the Energy Market..85
- Charle Chu, James Brownlow, Bin Fu and Guandong Xu. Deployment of Churn Prediction Model in Financial Services Industry.....91

Information Management and Systems93

- Lu Zhang, Zhan Bu, Zhiang Wu and Jie Cao. DGWC: Distributed and Generic Web Crawler for Online Information Extraction93
- Zhiyuan Zhang, Yun Liu, Haiqiang Chen and Qing Liu. POI Recommendation with Geographical and MultiTag Influences99
- Jiao Xue, Takao Terano, Hiroshi Deguchi and Manabu Ichikawa. Simulation Analysis of Immunization Policy Diffusion in Social Network with ABM Approach105
- Yaxin Hou, Cong Ma and Yidong Li. Research on Fire Risk Factors of Cotton in Railway Transportation111
- Jiancheng Shen, Feng Dong and Wu He. Using Media-Based Emotion to Predict Commodity Price116
- Qian Li, Wei Cao, Kentaro Shimizu and Zhenglu Yang. An Effective System for Managing Biological Data.....122
- Mohd Anwar, Wu He and Xiaohong Yuan. Employment Status and Cybersecurity Behaviors.....124
- Min Gu, Feng Zhu, Qing Guo, Junsheng Zhou, Weiguang Qu and Yanhui Gu. Towards Effective Web Page Classification.....126

Digital Humanities128

- Shi Shen, Changxiu Cheng, Kai Su, Jing Yang and Shanli Yang. Quantitative Visualization about Differences between Scientists concerned Nature Disasters and Historic Events128
- Cheng Chen, Genlin Ji, Bin Zhao. Learning Text to Model: A Bayesian Network based L-system Modeling Strategy.....134

Koraljka Golub and Marcelo Milrad. Digital Humanities as a Cross-Sector and Cross-Discipline Initiative: Prospects in the Linnaeus University Region136

User Modeling, Privacy, and Ethics.....139

Aastha Nigam, Salvador Aguinaga and Nitesh V. Chawla. Connecting the Dots to Infer Followers' Topical Interest on Twitter139

Anand Chinchore, Guandong Xu and Frank Jiang. Classifying Sybil in MSNs using C4.5145

Shugeng Ding, Yidong Li, Jianhui Zhang, Liang Chen, Zhen Wang and Qunqun Xu. An Efficient and Privacy-Preserving Ranked Fuzzy Keywords Search over Encrypted Cloud Data151

Peng Bian, Luyue Jiang, Yi Jin and Yidong Li. Coupled Feature Spaces Learning with Joint Graph Regularization for Person Re-identification157

Industrial Applications162

Aihua Jiang and Jianbo Gao. Fractal analysis of complex power load variations through adaptive multiscale filtering162

Raul Manongdo and Guandong Xu. Applying client churn prediction modelling on home-based care services industry.....167