

Contents – Part II

Crowdsourcing and Crowdsensing

Real-Time Target Tracking Through Mobile Crowdsensing	3
<i>Jinyu Shi and Weijia Jia</i>	
Crowdsourced Entity Alignment: A Decision Theory Based Approach.	19
<i>Yan Zhuang, Guoliang Li, and Jianhua Feng</i>	
A QoS-Aware Online Incentive Mechanism for Mobile Crowd Sensing.	37
<i>Hui Cai, Yanmin Zhu, and Jiadi Yu</i>	
Iterative Reduction Worker Filtering for Crowdsourced Label Aggregation. . .	46
<i>Jiyi Li and Hisashi Kashima</i>	

Web Data Model

Semantic Web Datatype Inference: Towards Better RDF Matching	57
<i>Irvin Dongo, Yudit Cardinale, Firas Al-Khalil, and Richard Chbeir</i>	
Cross-Cultural Web Usability Model	75
<i>Rukshan Alexander, David Murray, and Nik Thompson</i>	
How Fair Is Your Network to New and Old Objects?: A Modeling of Object Selection in Web Based User-Object Networks.	90
<i>Anita Chandra, Himanshu Garg, and Abyayananda Maiti</i>	
Modeling Complementary Relationships of Cross-Category Products for Personal Ranking.	98
<i>Wenli Yu, Li Li, Fei Hu, Fan Li, and Jinjing Zhang</i>	

Language Processing and Web Protocols

Eliminating Incorrect Cross-Language Links in Wikipedia	109
<i>Nacéra Bennacer, Francesca Bugiotti, Jorge Galicia, Mariana Patricio, and Gianluca Quercini</i>	
Combining Local and Global Features in Supervised Word Sense Disambiguation	117
<i>Xue Lei, Yi Cai, Qing Li, Haoran Xie, Ho-fung Leung, and Fu Lee Wang</i>	

A Concurrent Interdependent Service Level Agreement Negotiation Protocol in Dynamic Service-Oriented Computing Environments.	132
<i>Lei Niu, Fenghui Ren, and Minjie Zhang</i>	

A New Static Web Caching Mechanism Based on Mutual Dependency Between Result Cache and Posting List Cache	148
<i>Thanh Trinh, Dingming Wu, and Joshua Zhexue Huang</i>	

Web-Based Applications

A Large-Scale Visual Check-In System for TV Content-Aware Web with Client-Side Video Analysis Offloading	159
<i>Shuichi Kurabayashi and Hiroki Hanaoka</i>	

A Robust and Fast Reputation System for Online Rating Systems.	175
<i>Mohsen Rezvani and Mojtaba Rezvani</i>	

The Automatic Development of SEO-Friendly Single Page Applications Based on HIJAX Approach	184
<i>Siamak Hatami</i>	

Towards Intelligent Web Crawling – A Theme Weight and Bayesian Page Rank Based Approach	192
<i>Yan Tang, Lei Wei, Wangsong Wang, and Pengcheng Xuan</i>	

Data Storage and Generator

Efficient Multi-version Storage Engine for Main Memory Data Store	205
<i>Jinwei Guo, Bing Xiao, Peng Cai, Weining Qian, and Aoying Zhou</i>	

WeDGeM: A Domain-Specific Evaluation Dataset Generator for Multilingual Entity Linking Systems	221
<i>Emrah Inan and Oguz Dikenelli</i>	

Extracting Web Content by Exploiting Multi-Category Characteristics	229
<i>Qian Wang, Qing Yang, Jingwei Zhang, Rui Zhou, and Yanchun Zhang</i>	

Security and Privacy

PrivacySafer: Privacy Adaptation for HTML5 Web Applications.	247
<i>Georgia M. Kapitsaki and Theodoros Charalambous</i>	

Anonymity-Based Privacy-Preserving Task Assignment in Spatial Crowdsourcing	263
<i>Yue Sun, An Liu, Zhixu Li, Guanfeng Liu, Lei Zhao, and Kai Zheng</i>	

Understanding Evasion Techniques that Abuse Differences Among JavaScript Implementations	278
<i>Yuta Takata, Mitsuaki Akiyama, Takeshi Yagi, Takeo Hariu, and Shigeki Goto</i>	

Mining Representative Patterns Under Differential Privacy	295
<i>Xiaofeng Ding, Long Chen, and Hai Jin</i>	

A Survey on Security as a Service	303
<i>Wenyuan Wang and Sira Yongchareon</i>	

Sentiment Analysis

Exploring the Impact of Co-Experiencing Stressor Events for Teens Stress Forecasting	313
<i>Qi Li, Liang Zhao, Yuanyuan Xue, Li Jin, and Ling Feng</i>	

SGMR: Sentiment-Aligned Generative Model for Reviews	329
<i>He Zou, Litian Yin, Dong Wang, and Yue Ding</i>	

An Ontology-Enhanced Hybrid Approach to Aspect-Based Sentiment Analysis	338
<i>Daan de Heij, Artiom Troyanovsky, Cynthia Yang, Milena Zychlinsky Scharff, Kim Schouten, and Flavius Frasincar</i>	

DARE to Care: A Context-Aware Framework to Track Suicidal Ideation on Social Media	346
<i>Bilel Moulahi, Jérôme Azé, and Sandra Bringay</i>	

Recommender Systems

Local Top- <i>N</i> Recommendation via Refined Item-User Bi-Clustering	357
<i>Yuheng Wang, Xiang Zhao, Yifan Chen, Wenjie Zhang, and Weidong Xiao</i>	

HOMMIT: A Sequential Recommendation for Modeling Interest-Transferring via High-Order Markov Model	372
<i>Yang Xu, Xiaoguang Hong, Zhaohui Peng, Yupeng Hu, and Guang Yang</i>	

Modeling Implicit Communities in Recommender Systems	387
<i>Lin Xiao and Gu Zhaoquan</i>	

Coordinating Disagreement and Satisfaction in Group Formation for Recommendation	403
<i>Lin Xiao and Gu Zhaoquan</i>	

Factorization Machines Leveraging Lightweight Linked Open Data-Enabled Features for Top-N Recommendations	420
<i>Guangyuan Piao and John G. Breslin</i>	
A Fine-Grained Latent Aspects Model for Recommendation: Combining Each Rating with Its Associated Review	435
<i>Xuehui Mao, Shizhong Yuan, Weimin Xu, and Daming Wei</i>	
Auxiliary Service Recommendation for Online Flight Booking	450
<i>Hongyu Lu, Jian Cao, Yudong Tan, and Quanwu Xiao</i>	
How Does Fairness Matter in Group Recommendation	458
<i>Lin Xiao and Gu Zhaoquan</i>	
Exploiting Users' Rating Behaviour to Enhance the Robustness of Social Recommendation.	467
<i>Zizhu Zhang, Weiliang Zhao, Jian Yang, Surya Nepal, Cecile Paris, and Bing Li</i>	
Special Sessions on Security and Privacy	
A Study on Securing Software Defined Networks	479
<i>Raihan Ur Rasool, Hua Wang, Wajid Rafique, Jianming Yong, and Jinli Cao</i>	
A Verifiable Ranked Choice Internet Voting System	490
<i>Xuechao Yang, Xun Yi, Caspar Ryan, Ron van Schyndel, Fengling Han, Surya Nepal, and Andy Song</i>	
Privacy Preserving Location Recommendations.	502
<i>Shahriar Badsha, Xun Yi, Ibrahim Khalil, Dongxi Liu, Surya Nepal, and Elisa Bertino</i>	
Botnet Command and Control Architectures Revisited: Tor Hidden Services and Fluxing	517
<i>Marios Anagnostopoulos, Georgios Kambourakis, Panagiotis Drakatos, Michail Karavolos, Sarantis Kotsilitis, and David K.Y. Yau</i>	
My Face is Mine: Fighting Unpermitted Tagging on Personal/Group Photos in Social Media	528
<i>Lihong Tang, Wanlun Ma, Sheng Wen, Marthie Grobler, Yang Xiang, and Wanlei Zhou</i>	
Cryptographic Access Control in Electronic Health Record Systems: A Security Implication.	540
<i>Pasupathy Vimalachandran, Hua Wang, Yanchun Zhang, Guangping Zhuo, and Hongbo Kuang</i>	

SDN-based Dynamic Policy Specification and Enforcement for Provisioning SECaaS in Cloud	550
<i>Uday Tupakula, Vijay Varadharajan, and Kallol Karmakar</i>	
Topic Detection with Locally Weighted Semi-supervised Collective Learning	562
<i>Ye Wang, Yong Quan, Bin Zhou, Yanchun Zhang, and Min Peng</i>	
Author Index	573

Contents – Part I

Microblog Data Analysis

A Refined Method for Detecting Interpretable and Real-Time Bursty Topic in Microblog Stream.	3
<i>Tao Zhang, Bin Zhou, Jiuming Huang, Yan Jia, Bing Zhang, and Zhi Li</i>	
Connecting Targets to Tweets: Semantic Attention-Based Model for Target-Specific Stance Detection	18
<i>Yiwei Zhou, Alexandra I. Cristea, and Lei Shi</i>	
A Network Based Stratification Approach for Summarizing Relevant Comment Tweets of News Articles	33
<i>Roshni Chakraborty, Maitry Bhavsar, Sourav Dandapat, and Joydeep Chandra</i>	
Interpreting Reputation Through Frequent Named Entities in Twitter.	49
<i>Nacéra Bennacer, Francesca Bugiotti, Moditha Hewasinghage, Suela Isaj, and Gianluca Quercini</i>	

Social Network Data Analysis

Discovering and Tracking Active Online Social Groups.	59
<i>Md Musfique Anwar, Chengfei Liu, Jianxin Li, and Tarique Anwar</i>	
Dynamic Relationship Building: Exploitation Versus Exploration on a Social Network	75
<i>Bo Yan, Yang Chen, and Jiamou Liu</i>	
Social Personalized Ranking Embedding for Next POI Recommendation	91
<i>Yan Long, Pengpeng Zhao, Victor S. Sheng, Guanfeng Liu, Jiajie Xu, Jian Wu, and Zhiming Cui</i>	
Assessment of Prediction Techniques: The Impact of Human Uncertainty . . .	106
<i>Kevin Jasberg and Sergej Sizov</i>	

Data Mining

Incremental Structural Clustering for Dynamic Networks	123
<i>Yazhong Chen, Rong-Hua Li, Qiangqiang Dai, Zhenjun Li, Shaojie Qiao, and Rui Mao</i>	

Extractive Summarization via Overlap-Based Optimized Picking	135
<i>Gaokun Dai and Zhendong Niu</i>	
Spatial Information Recognition in Web Documents	
Using a Semi-supervised Machine Learning Method	150
<i>Hendi Lie, Richi Nayak, and Gordon Wyeth</i>	
When Will a Repost Cascade Settle Down?	165
<i>Chi Chen, HongLiang Tian, Jie Tang, and ChunXiao Xing</i>	
Pattern Mining	
Mining Co-location Patterns with Dominant Features.	183
<i>Yuan Fang, Lizhen Wang, Xiaoxuan Wang, and Lihua Zhou</i>	
Maximal Sub-prevalent Co-location Patterns and Efficient	
Mining Algorithms	199
<i>Lizhen Wang, Xuguang Bao, Lihua Zhou, and Hongmei Chen</i>	
Overlapping Communities Meet Roles and Respective Behavioral	
Patterns in Networks with Node Attributes.	215
<i>Gianni Costa and Riccardo Ortale</i>	
Efficient Approximate Entity Matching Using Jaro-Winkler Distance.	231
<i>Yaoshu Wang, Jianbin Qin, and Wei Wang</i>	
Cloud Computing	
Long-Term Multi-objective Task Scheduling with Diff-Serv	
in Hybrid Clouds	243
<i>Puheng Zhang, Chuang Lin, Wenzhuo Li, and Xiao Ma</i>	
Online Cost-Aware Service Requests Scheduling in Hybrid Clouds	
for Cloud Bursting	259
<i>Yanhua Cao, Li Lu, Jiadi Yu, Shiyong Qian, Yanmin Zhu, Minglu Li,</i>	
<i>Jian Cao, Zhong Wang, Juan Li, and Guangtao Xue</i>	
Adaptive Deployment of Service-Based Processes into Cloud Federations . . .	275
<i>Chahrazed Labba, Nour Assy, Narjès Bellamine Ben Saoud,</i>	
<i>and Walid Gaaloul</i>	
Towards a Public Cloud Services Registry	290
<i>Ahmed Mohammed Ghamry, Asma Musabah Alkalbani, Vu Tran,</i>	
<i>Yi-Chan Tsai, My Ly Hoang, and Farookh Khadeer Hussain</i>	

Query Processing

Location-Based Top- k Term Querying over Sliding Window	299
<i>Ying Xu, Lisi Chen, Bin Yao, Shuo Shang, Shunzhi Zhu, Kai Zheng, and Fang Li</i>	
A Kernel-Based Approach to Developing Adaptable and Reusable Sensor Retrieval Systems for the Web of Things.	315
<i>Nguyen Khoi Tran, Quan Z. Sheng, M. Ali Babar, and Lina Yao</i>	
Reliable Retrieval of Top- k Tags	330
<i>Yong Xu, Reynold Cheng, and Yudian Zheng</i>	
Estimating Support Scores of Autism Communities in Large-Scale Web Information Systems	347
<i>Nguyen Thin, Nguyen Hung, Svetha Venkatesh, and Dinh Phung</i>	

Spatial and Temporal Data

DTRP: A Flexible Deep Framework for Travel Route Planning	359
<i>Jie Xu, Chaozhuo Li, Senzhang Wang, Feiran Huang, Zhoujun Li, Yueying He, and Zhonghua Zhao</i>	
Taxi Route Recommendation Based on Urban Traffic Coulomb's Law	376
<i>Zheng Lyu, Yongxuan Lai, Kuan-Ching Li, Fan Yang, Minghong Liao, and Xing Gao</i>	
Efficient Order-Sensitive Activity Trajectory Search	391
<i>Kaiyang Guo, Rong-Hua Li, Shaojie Qiao, Zhenjun Li, Weipeng Zhang, and Minhua Lu</i>	
Time Series Classification by Modeling the Principal Shapes	406
<i>Zhenguo Zhang, Yanlong Wen, Ying Zhang, and Xiaojie Yuan</i>	
Effective Caching of Shortest Travel-Time Paths for Web Mapping Mashup Systems.	422
<i>Detian Zhang, An Liu, Gangyong Jia, Fei Chen, Qing Li, and Jian Li</i>	

Graph Theory

Discovering Hierarchical Subgraphs of K-Core-Truss.	441
<i>Zhen-jun Li, Wei-Peng Zhang, Rong-Hua Li, Jun Guo, Xin Huang, and Rui Mao</i>	
Efficient Subgraph Matching on Non-volatile Memory.	457
<i>Yishu Shen and Zhaonian Zou</i>	

Influenced Nodes Discovery in Temporal Contact Network	472
<i>Jinjing Huang, Tianqiao Lin, An Liu, Zhixu Li, Hongzhi Yin, and Lei Zhao</i>	
Tracking Clustering Coefficient on Dynamic Graph via Incremental Random Walk	488
<i>Qun Liao, Lei Sun, Yunpeng Yuan, and Yulu Yang</i>	
Event Detection	
Event Cube – A Conceptual Framework for Event Modeling and Analysis. . . .	499
<i>Qing Li, Yun Ma, and Zhenguo Yang</i>	
Cross-Domain and Cross-Modality Transfer Learning for Multi-domain and Multi-modality Event Detection	516
<i>Zhenguo Yang, Min Cheng, Qing Li, Yukun Li, Zehang Lin, and Wenyin Liu</i>	
Determining Repairing Sequence of Inconsistencies in Content-Related Data.	524
<i>Yuefeng Du, Derong Shen, Tiezheng Nie, Yue Kou, and Ge Yu</i>	
Author Index	541

Web Information Systems Engineering – WISE 2017

18th International Conference, Puschino, Russia,

October 7-11, 2017, Proceedings, Part II

Bouguettaya, A.; Gao, Y.; Klimenko, A.; Chen, L.; Zhang,

X.; Dzerzhinskiy, F.; Jia, W.; Klimenko, S.V.; Li, Q. (Eds.)

2017, XXII, 576 p. 167 illus., Softcover

ISBN: 978-3-319-68785-8