

Contents

The Second International Workshop on Emergency Management in Big Data Age (BigEM 2014)

Predicting Popularity of Microblogs in Emerging Disease Event	3
<i>Jiaqi Liu, Zhidong Cao, and Daniel Zeng</i>	
A Cross-Simulation Method for Large-Scale Traffic Evacuation with Big Data . . .	14
<i>Shengcheng Yuan, Yi Liu, Gangqiao Wang, and Hui Zhang</i>	
Detecting Fake Reviews of Hype About Restaurants by Sentiment Analysis . . .	22
<i>Run Yu Chen, Jin Yi Guo, and Xiao Long Deng</i>	
Where to Find Help When You Are in an Emergency? HelpMe: A Guidance System for Self-rescue	31
<i>Jiahai Wu, Huangfu Yang, Xiaowei Gao, Juncai Ma, and Kuien Liu</i>	
Keyword-Based Semantic Analysis of Microblog for Public Opinion Study in Online Collective Behaviors	44
<i>Yefeng Ma, Qing Deng, Xinzhi Wang, Jiaqi Liu, and Hui Zhang</i>	
Research on Reasoning Model of Firefighting and Rescue Cases	56
<i>Qingchun Kang, Lihong Lu, Libiao Pan, Yu Li, Jian Gao, and Danjun Lian</i>	
Empirical Study of Online Public Opinion Index Prediction on Real Accidents Data	65
<i>Xiao Long Deng and Yu Xiao Li</i>	
Public Opinion Analysis and Crisis Response in Mass Incidents: A Case Study of a Flight Delay Event in China	77
<i>Yi Liu, Yefeng Ma, Qing Deng, Yi Liu, and Hui Zhang</i>	
An Effective Method to Detect People in Danger	87
<i>Hongtai Zhang, Kuien Liu, Xiuli Wang, Limin Guo, and Zhiming Ding</i>	
Structured and Quantitative Research on Scenario of Firefighting and Rescue Cases	98
<i>Lihong Lu, Qingchun Kang, Shaofang Yang, Yu Li, Danjun Lian, and Sicheng Li</i>	
A Cross-Reasoning Method for Scenario Awareness and Decision-Making Support in Earthquake Emergency Response	106
<i>Jing Qian, Yi Liu, Gangqiao Wang, Ni Yang, and Hui Zhang</i>	

PM2.5 Air Quality Index Prediction Using an Ensemble Learning Model.	119
<i>Wei Xu, Cheng Cheng, Danhuai Guo, Xin Chen, Hui Yuan, Rui Yang, and Yi Liu</i>	
Cloud Service-Oriented Modeling and Simulation of Regional Crowd Evacuation in Emergency.	130
<i>Weiqing Ling, Jian Wang, and Xinquan Wei</i>	
Strategy Study on Mass Evacuation with LBS Information.	141
<i>Yi-zhou Chen, Rui Yang, and Yi Liu</i>	
Online Social Network as a Powerful Tool to Identify Experts for Emergency Management.	151
<i>Wei Du, Wei Xu, Jianshan Sun, and Jian Ma</i>	
The 2nd International Workshop on Big Data Management on Emerging Hardware (HardBD 2014)	
Wear-Aware Algorithms for PCM-Based Database Buffer Pools	165
<i>Yi Ou, Lei Chen, Jianliang Xu, and Theo Härder</i>	
Accelerate K-means Algorithm by Using GPU in the Hadoop Framework	177
<i>HuanXin Zheng and JunMin Wu</i>	
An Efficient Hybrid Index Structure for Temporal Marine Data	187
<i>Dongmei Huang, Le Sun, Danfeng Zhao, and Xiaoluo Zheng</i>	
On Massive Spatial Data Retrieval Based on Spark.	200
<i>Xiaolan Xie, Zhuang Xiong, Xin Hu, Guoqing Zhou, and Jinsheng Ni</i>	
HDStore: An SSD/HDD Hybrid Distributed Storage Scheme for Large-Scale Data	209
<i>Zhijie Feng, Zhiyong Feng, Xin Wang, Guozheng Rao, Yazhou Wei, and Zhiyuan Li</i>	
International Workshop on Data Management for Next-Generation Location-Based Services (DaNoS 2014)	
Rating Aware Route Planning in Road Networks	223
<i>Junqiang Dai, Wei Jiang, Guanfeng Liu, Jiajie Xu, Lei Zhao, and An Liu</i>	
Optimal RSUs Deployment in Vehicular Networks	236
<i>Chunyan Liu, Hejiao Huang, Hongwei Du, and Xiaohua Jia</i>	

Cache-Aware Query Processing with User Privacy Protection in Location-Based Services.	247
<i>Zhengang Wu, Liangwen Yu, Huiping Sun, Zhi Guan, and Zhong Chen</i>	

International Workshop on Human Aspects of Making Recommendations in Social Ubiquitous Networking Environments (HRSUNE 2014)

A Review of Factors Affecting Recommender Decisions in Social Networks for Educational Purposes	261
<i>Estefanía Martín, Isidoro Hernán-Losada, and Pablo A. Haya</i>	

Exploring Arduino for Building Educational Context-Aware Recommender Systems that Deliver Affective Recommendations in Social Ubiquitous Networking Environments	272
<i>Olga C. Santos and Jesus G. Boticario</i>	

The Ethics of a Recommendation System.	287
<i>Pinata Winoto and Tiffany Tang</i>	

The Negative Effects of 'Too Accurate' Recommendation Results: A Pilot Study of the Effects of Search Engine Overuse on Chinese Students . . .	299
<i>Lotus Xinhe Zhou and Tiffany Y. Tang</i>	

Supporting Growers with Recommendations in RedVides: Some Human Aspects Involved	307
<i>Olga C. Santos, Sergio Salmeron-Majadas, and Jesus G. Boticario</i>	

Geographical Information in a Multi-domain Recommender System	315
<i>Tiffany Y. Tang, Pinata Winoto, and Robert Ziqin Ye</i>	

International Workshop on Big Data Systems and Services (BIDASYS 2014)

Hashtag Recommendation Based on User Tweet and Hashtag Classification on Twitter	325
<i>Mina Jeon, Sanghoon Jun, and Eenjun Hwang</i>	

Business Ecosystem and Ecosystem of Big Data.	337
<i>Soonduck Yoo, Kwangdon Choi, and Malrey Lee</i>	

Using Big Data Strategy for the Development of the Communication Industry. . .	349
<i>Soonduck Yoo, Jungihl Kim, and Kwangsun Ryu</i>	

A Data Model for Object-Based Seamless Digital Map Using Digital Map 2.0.	360
<i>Hyeongsoo Kim, Hyun Woo Park, Wonwoo Cho, Incheon Paik, and Keun Ho Ryu</i>	

Parallel Gene Clustering Using MapReduce	372
<i>A.K.M. Tauhidul Islam, Chae-Gyun Lim, and Byeong-Soo Jeong</i>	
An Efficient Patent Storing Mechanism Based on SQLite on Hadoop Platform . . .	382
<i>Xuhua Rui, Baul Kim, and Dugki Min</i>	
Considering Rating as Probability Distribution of Attitude in Recommender System	393
<i>Xiangyu Zhao, Zhendong Niu, Wentao Wang, Ke Niu, and Wu Yuan</i>	
On Computing Similarity in Academic Literature Data: Methods and Evaluation.	403
<i>Masoud Reyhani Hamedani and Sang-Wook Kim</i>	
Ranking People by Integrating Professional Capability, Sociability and Time Decaying Effect	413
<i>Hongguo Yang, Derong Shen, Yue Kou, Tiezheng Nie, and Ge Yu</i>	
Author Index	427