

Table of Contents

Keynotes

Information Networks Mining and Analysis	1
<i>Philip S. Yu</i>	
iMiner: From Passive Searching to Active Pushing	3
<i>Deyi Li</i>	
On the Querying for Places on the Mobile Web	4
<i>Christian S. Jensen</i>	

Session 1: Classification and Clustering

Music Review Classification Enhanced by Semantic Information	5
<i>Wei Zheng, Chaokun Wang, Rui Li, Xiaoping Ou, and Weijun Chen</i>	
Role Discovery for Graph Clustering	17
<i>Bin-Hui Chou and Einoshin Suzuki</i>	
Aggregate Distance Based Clustering Using Fibonacci Series-FIBCLUS	29
<i>Rakesh Rawat, Richi Nayak, Yuefeng Li, and Slah Alsaleh</i>	
Exploiting Explicit Semantics-Based Grouping for Author Interest Finding	41
<i>Ali Daud</i>	

Session 2: Spatial and Temporal Databases

Top-K Probabilistic Closest Pairs Query in Uncertain Spatial Databases	53
<i>Mo Chen, Zixi Jia, Yu Gu, and Ge Yu</i>	
CkNN Query Processing over Moving Objects with Uncertain Speeds in Road Networks	65
<i>Guohui Li, Yanhong Li, LihChyun Shu, and Ping Fan</i>	
Discrete Trajectory Prediction on Mobile Data	77
<i>Nan Zhao, Wenhao Huang, Guojie Song, and Kunqing Xie</i>	
Cleaning Uncertain Streams for Query Improvement	89
<i>Qian Zhang, Shan Wang, Biao Qin, and Xiao Zhang</i>	

Session 3: Personalization and Recommendation

Personalized Web Search with User Geographic and Temporal Preferences	95
<i>Dan Yang, Tiezheng Nie, Derong Shen, Ge Yu, and Yue Kou</i>	
Web User Profiling on Proxy Logs and Its Evaluation in Personalization	107
<i>Hiroshi Fujimoto, Minoru Etoh, Akira Kinno, and Yoshikazu Akinaga</i>	
Exploring Folksonomy and Cooking Procedures to Boost Cooking Recipe Recommendation	119
<i>Lijuan Yu, Qing Li, Haoran Xie, and Yi Cai</i>	
Effective Hybrid Recommendation Combining Users-Searches Correlations Using Tensors	131
<i>Rakesh Rawat, Richi Nayak, and Yuefeng Li</i>	

Session 4: Data Analysis and Application

Maintaining Internal Consistency of Report for Real-Time OLAP with Layer-Based View	143
<i>Ziyu Lin, Yongxuan Lai, Chen Lin, Yi Xie, and Quan Zou</i>	
Efficient Approximate Top-k Query Algorithm Using Cube Index	155
<i>Dongqu Chen, Guang-Zhong Sun, and Neil Zhenqiang Gong</i>	
DVD: A Model for Event Diversified Versions Discovery	168
<i>Liang Kong, Rui Yan, Yijun He, Yan Zhang, Zhenwei Zhang, and Li Fu</i>	
Categorical Data Skyline Using Classification Tree	181
<i>Wokey Lee, Justin JongSu Song, and Carson K.-S. Leung</i>	

Session 5: Web Mining

Quality Evaluation of Wikipedia Articles through Edit History and Editor Groups	188
<i>Se Wang and Mizuho Iwaihara</i>	
Towards Improving Wikipedia as an Image-Rich Encyclopaedia through Analyzing Appropriateness of Images for an Article	200
<i>Xinpeng Zhang, Yasuhito Asano, and Masatoshi Yoshikawa</i>	

SDDB: A Self-Dependent and Data-Based Method for Constructing Bilingual Dictionary from the Web	213
<i>Jun Han, Lizhu Zhou, and Juan Liu</i>	

Measuring Similarity of Chinese Web Databases Based on Category Hierarchy	225
<i>Juan Liu, Ju Fan, and Lizhu Zhou</i>	

Session 6: Web Search and Information Retrieval

Effective Term Weighting in ALT Text Prediction for Web Image Retrieval	237
<i>Vundavalli Srinivasarao, Prasad Pingali, and Vasudeva Varma</i>	

Layout Object Model for Extracting the Schema of Web Query Interfaces	245
<i>Tiezheng Nie, Derong Shen, Ge Yu, and Yue Kou</i>	

Tagging Image with Informative and Correlative Tags	258
<i>Xiaoming Zhang, Heng Tao Shen, Zi Huang, and Zhoujun Li</i>	

Let Other Users Help You Find Answers: A Collaborative Question-Answering Method with Continuous Markov Chain Model	264
<i>Xiaolong Wang and Ming Zhang</i>	

Hybrid Index Structures for Temporal-Textual Web Search	271
<i>Peiquan Jin, Hong Chen, Sheng Lin, Xujian Zhao, and Lihua Yue</i>	

Session 7: Complex and Social Networks

Complex Event Processing over Unreliable RFID Data Streams	278
<i>Yanming Nie, Zhanhuai Li, and Qun Chen</i>	

A Graph Model Based Simulation Tool for Generating RFID Streaming Data	290
<i>Haipeng Zhang, Joonho Kwon, and Bonghee Hong</i>	

Assisting the Design of XML Schema: Diagnosing Nondeterministic Content Models	301
<i>Haiming Chen and Ping Lu</i>	

Improving Matching Process in Social Network Using Implicit and Explicit User Information	313
<i>Slah Alsaleh, Richi Nayak, Yue Xu, and Lin Chen</i>	

Dynamic Network Motifs: Evolutionary Patterns of Substructures in Complex Networks	321
<i>Yutaka Kabutoya, Kyosuke Nishida, and Ko Fujimura</i>	

Social Network Analysis on KAD and Its Application	327
<i>Xiangtao Liu, Yang Li, Zhezhong Li, and Xueqi Cheng</i>	

Session 8: Secure and Semantic Web

Modeling and Querying Probabilistic RDFS Data Sets with Correlated Triples	333
<i>Chi-Cheong Szeto, Edward Hung, and Yu Deng</i>	

A Tableau Algorithm for Paraconsistent and Nonmonotonic Reasoning in Description Logic-Based System	345
<i>Xiaowang Zhang, Zuoquan Lin, and Kewen Wang</i>	

Key Concepts Identification and Weighting in Search Engine Queries ...	357
<i>Jiawang Liu and Peng Ren</i>	

SecGuard: Secure and Practical Integrity Protection Model for Operating Systems	370
<i>Ennan Zhai, Qingni Shen, Yonggang Wang, Tao Yang, Liping Ding, and Sihan Qing</i>	

A Traceable Certificateless Threshold Proxy Signature Scheme from Bilinear Pairings	376
<i>Tao Yang, Hu Xiong, Jianbin Hu, Yonggang Wang, Yong Deng, Biao Xiao, and Zhong Chen</i>	

Special Session 1: Demo Papers

A Mashup Tool for Cross-Domain Web Applications Using HTML5 Technologies	382
<i>Akiyoshi Matono, Akihito Nakamura, and Isao Kojima</i>	

Change Tracer: A Protégé Plug-In for Ontology Recovery and Visualization	386
<i>Asad Masood Khattak, Khalid Latif, Zeeshan Pervez, Iram Fatima, Sungyoung Lee, and Young-Koo Lee</i>	

Augmenting Traditional ER Method to Support Spatiotemporal Database Applications	388
<i>Sheng Lin, Peiquan Jin, Lei Zhao, Huaishuai Wang, and Lanlan Zhang</i>	

STOC: Extending Oracle to Support Spatiotemporal Data Management	393
<i>Lei Zhao, Peiquan Jin, Xiaoxiang Zhang, Lanlan Zhang, and Huaishuai Wang</i>	

Special Session 2: The Second International Workshop on Unstructured Data Management

Preface to the 2nd International Workshop on Unstructured Data Management (USDM 2011)	398
<i>Tengjiao Wang</i>	
ITEM: Extract and Integrate Entities from Tabular Data to RDF Knowledge Base	400
<i>Xiaoyan Guo, Yueguo Chen, Jinchuan Chen, and Xiaoyong Du</i>	
Batch Text Similarity Search with MapReduce.....	412
<i>Rui Li, Li Ju, Zhuo Peng, Zhiwei Yu, and Chaokun Wang</i>	
An Empirical Study of Massively Parallel Bayesian Networks Learning for Sentiment Extraction from Unstructured Text	424
<i>Wei Chen, Lang Zong, Weijing Huang, Gaoyan Ou, Yue Wang, and Dongqing Yang</i>	

Special Session 3: The Second International Workshop on XML Data Management

Preface of the 2nd International Workshop on XML Data Management	436
<i>Jiaheng Lu</i>	
XPath Rewriting Using Views: The More the Merrier (Keynote Speech)	438
<i>Bogdan Cautis</i>	
OSD-DB: A Military Logistics Mobile Database.....	440
<i>Denis Rinfret, Cyrille Chênevert, and Frédéric Drolet</i>	
Querying and Reasoning with RDF(S)/OWL in XQuery	450
<i>Jesús M. Almendros-Jiménez</i>	
A Survey on XML Keyword Search.....	460
<i>Zongqi Tian, Jiaheng Lu, and Deying Li</i>	
Schema Mapping with Quality Assurance for Data Integration	472
<i>Xu Bian, Hongzhi Wang, and Hong Gao</i>	
Author Index	485