



CIKM 2015 Schedule – Last edited October 14, 2015

Conference-At-A-Glance

Details of Tutorial and Workshop room assignments will appear in pages 41–44 of the Program Booklet that will be provided on Registration.

	19 Monday	101/102	103	104	105	106	107	108
08:00	Registration: Level 1, Melbourne Convention and Exhibition Centre							
09:00	Tutorials and Workshops, see pages 41-44							
10:30	Break							
10:50	Tutorials and Workshops, see pages 41-44							
12:30	Lunch (not included)							
13:30	Tutorials and Workshops, see pages 41-44							
15:00	Break							
15:20	Tutorials and Workshops, see pages 41-44							
17:00								

	20 Tuesday	101/102	103	104	105	106	107	108
07:30	Registration: Level 1, Melbourne Convention and Exhibition Centre							
08:30				Welcome				
09:00				Keynote: Jaime Teevan				
10:00	Break							
10:30	1A: Scalability	1B: Personal Search	1C: Learning	1D: Text Processing	1E: Applications	1F: Social Media 1		
12:10	Lunch (not included)							
13:45	2A: Graphs	2B: Retrieval Algorithms	2C: Text Analysis	2D: Clustering	2E: Users and Predictions	2F: Heterogeneous Networks		
15:25	Break							
15:55	3A: Veracity	3B: Social Networks 1	3C: Query Completion	3D: Microblogs	3E: Graph-Based Analysis	3F: Classification 1		
17:10	Poster Session and Reception: Level 1 Foyer Welcome to Country Ceremony at 6pm							
17:15								
19:00								

21 Wednesday	101/102	103	104	105	106	107	108
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09:00				Keynote: Xiaofang Zhou			
10:00	Break						
10:30	4A: Location-Based Services	4B: Query Explanation	4C: Crowds	4D: Optimization	4E: Social Networks 2	4F: Matrix Factorization	
12:10	Lunch (not included)						
13:45	5A: Trips and Trajectories	5B: Retrieval Enhancements 1	5C: Privacy	5D: Data Streams	5E: Classification 2	5F: Sentiment and Content Analysis	
15:25	Break						
15:55	6A: Time Series and Streams	6B: Adaptive Learning	6C: Points-of-Interest	6D: Matrices	6E: Citation Networks	6F: Knowledge Bases	
17:10							17:35
19:00	Banquet: Melbourne Aquarium, see page 24 for address						
22:30							

22 Thursday	101/102	103	104	105	106	107	108
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09:00				Industry Keynote: Andrew Tomkins			
10:00	Break						
10:30	7A: Database Optimization	7B: Retrieval Enhancements 2	7C: Search Mechanisms		Industry 2: Igor Perisic Amy Shi-Nash	7D: Social Networks 3	
12:10	Lunch (included): Level 1 Foyer				CIKM Business Meeting	Lunch (included)	
13:00							
13:45	8A: Query Evaluation	8B: Web Search	8C: Social Media 2		Industry 3: Sofus Macskassy Hang Li	8D: Recommendation	
15:25	Break						
15:55					Industry 4: Wei-Ying Ma		
16:45					Conference close		

23 Friday	101/102	103	104	105	106	107	108
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09:00	Tutorials and Workshops, see pages 41-44						
10:30	Break						
10:50	Tutorials and Workshops, see pages 41-44						
12:30	Lunch (included): Level 1 Foyer						
13:30	Tutorials and Workshops, see pages 41-44						
15:00	Break						
15:20	Tutorials and Workshops, see pages 41-44						
17:00							

Monday, 9:00am–5:00pm, Tutorials and Workshops

Room: Various

Time: Monday, 9:00am–5:00pm

Chair: Various

Tuesday, 8:30am–9:00am, Conference Opening and Welcome

Room: 105/106

Time: Tuesday, 8:30am–9:00am

Chair: James Bailey and Alistair Moffat (*The University of Melbourne*)

Tuesday, 9:00am–10:00am, Keynote: Jaime Teevan

Room: 105/106

Time: Tuesday, 9:00am–10:00am

Chair: Alistair Moffat (*The University of Melbourne*)

Slow Search: Improving Information Retrieval Using Human Assistance

Tuesday, 10:30am–12:10pm, Session 1

1A: Scalability

Room: 101/102

Time: Tuesday, 10:30am–12:10pm

Chair: Rui Zhang (*The University of Melbourne*)

1A1: *External Data Access and Indexing in AsterixDB*

Abdullah Alamoudi, Michael Carey, Raman Grover, Vinayak Borkar (*University of California Irvine*).

1A2: *Dynamic Resource Management in a Massively Parallel Stream Processing Engine*

Kasper Madsen, Yongluan Zhou (*University of Southern Denmark*).

1A3: *A Parallel GPU-Based Approach to Clustering Very Fast Data Streams*

Pengtao Huang, Xiu Li, Bo Yuan (*Tsinghua University*).

1A4: *Scalable Clustering Algorithm Via a Triangle Folding Processing for Complex Networks*

Ying Kang, Xiaoyan Gu, Weiping Wang, Dan Meng (*Chinese Academy of Sciences*).

1B: Personal Search

Room: 103

Time: Tuesday, 10:30am–12:10pm

Chair: Peter Bailey (*Microsoft*)

1B1: *Understanding the Impact of the Role Factor in Collaborative Information Retrieval*

Lynda Tamine, Laure Soulier (*Université Paul Sabatier & IRIT France*).

1B2: *Experiments with a Venue-Centric Model for Personalised and Time-Aware Venue Suggestion*

Romain Deveaud, M-Dyaa Albakour, Craig Macdonald, Iadh Ounis (*University of Glasgow*).

1B3: *Search Result Diversification Based on Hierarchical Intents*

Sha Hu, Zhicheng Dou, Xiaojie Wang (*Renmin University of China*); Tetsuya Sakai (*Waseda University*); Ji-Rong Wen (*Renmin University of China*).

1B4: *Category-Driven Approach for Local Related Business Recommendations*

Yonathan Perez (*Stanford University*); Michael Schueppert, Matthew Lawlor, Shaunak Kishore (*Google*).

1C: Learning

Room: 104

Time: Tuesday, 10:30am–12:10pm

Chair: Leif Azzopardi (*University of Glasgow*)

1C1: *A Soft Computing Approach for Learning to Aggregate Rankings*

Javier Vargas Muñoz, Ricardo da Silva Torres (*UNICAMP Brazil*); Marcos Gonçalves (*UFMG Brazil*).

1C2: *Approximate String Matching by End-Users Using Active Learning*

Lutz Büch, Artur Andrzejak (*Heidelberg University*).

1C3: *A Unified Posterior Regularized Topic Model with Maximum Margin for Learning-To-Rank*

Shoaib Jameel (*Cardiff University*); Wai Lam (*The Chinese University of Hong Kong*); Steven Schockaert (*Cardiff University*); Lidong Bing (*Carnegie Mellon University*).

1C4: *Collaborating Between Local and Global Learning for Distributed Online Multiple Tasks*

Xin Jin (*Chinese Academy of Sciences & Huawei*); Ping Luo, Fuzhen Zhuang, Jia He, Qing He (*Chinese Academy of Sciences*).

1D: Text Processing

Room: 105

Time: Tuesday, 10:30am–12:10pm

Chair: Tim Baldwin (*The University of Melbourne*)

1D1: *Lifespan-Based Partitioning of Index Structures for Time-Travel Text Search*

Animesh Nandi, Suriya Subramanian, Sriram Lakshminarasimhan, Prasad Deshpande, Sriram Raghavan (*IBM Research India*).

1D2: *Contextual Text Understanding in Distributional Semantic Space*

Jianpeng Cheng (*Microsoft Research Asia & University of Oxford*); Zhongyuan Wang (*Renmin University of China & Microsoft Research Asia*); Ji-Rong Wen (*Renmin University of China*); Jun Yan, Zheng Chen (*Microsoft Research Asia*).

1D3: *External Knowledge and Query Strategies in Active Learning: A Study in Clinical Information Extraction*

Mahnoosh Kholghi (*Queensland University of Technology & CSIRO*); Laurianne Sitbon, Guido Zuccon (*Queensland University of Technology*); Anthony Nguyen (*CSIRO Australia*).

1D4: *Ranking Deep Web Text Collections for Scalable Information Extraction*

Pablo Barrio, Luis Gravano (*Columbia University*); Chris Develder (*Ghent University & iMinds*).

1E: Applications

Room: 106

Time: Tuesday, 10:30am–12:10pm

Chair: Huizhi (Elly) Liang (*The University of Melbourne*)

1E1: *Forming Online Support Groups for Internet and Behavior Related Addictions*

Chih-Ya Shen (*Academia Sinica*); Hong-Han Shuai (*National Taiwan University*); De-Nian Yang (*Academia Sinica*); Yi-Feng Lan (*Tamkang University*); Wang-Chien Lee (*The Pennsylvania State University*); Philip S. Yu (*University of Illinois Chicago & Tsinghua University*); Ming-Syan Chen (*National Taiwan University*).

1E2: *Concept-Based Relevance Models for Medical Information Retrieval*

Chunye Wang (*University of California Santa Cruz*); Ram Akella (*University of California Santa Cruz & University of California Berkeley*).

1E3: *PlateClick: Bootstrapping Food Preferences Through an Adaptive Visual Interface*

Longqi Yang, Yin Cui, Fan Zhang (*Cornell University*); J. P. Pollak, Serge Belongie, Deborah Estrin (*Cornell Tech*).

1E4: *Data Driven Water Pipe Failure Prediction: A Bayesian Nonparametric Approach*
Peng Lin, Bang Zhang, Yi Wang, Zhidong Li, Bin Li, Yang Wang, Fang Chen (NICTA Australia).

1F: Social Media 1

Room: 107
Time: Tuesday, 10:30am–12:10pm
Chair: Lynda Tamine (IRIT/CNRS France)

1F1: *Tumblr Blog Recommendation with Boosted Inductive Matrix Completion*
Donghyuk Shin (University of Texas Austin); Suleyman Cetintas, Kuang-Chih Lee (Yahoo Labs); Inderjit Dhillon (University of Texas Austin).

1F2: *BiasWatch: A Lightweight System for Discovering and Tracking Topic-Sensitive Opinion Bias in Social Media*
Haokai Lu, James Caverlee, Wei Niu (Texas A&M University).

1F3: *Knowlywood: Mining Activity Knowledge from Hollywood Narratives*
Niket Tandon (Max Planck Institute for Informatics); Gerard de Melo (Tsinghua University); Abir De (Indian Institute of Technology Kharagpur); Gerhard Weikum (Max Planck Institute for Informatics).

1F4: *Entity and Aspect Extraction for Organizing News Comments*
Radityo Eko Prasajo, Mouna Kacimi, Werner Nutt (Free University of Bozen-Bolzano).

Tuesday, 1:45pm–3:25pm, Session 2

2A: Graphs

Room: 101/102
Time: Tuesday, 1:45pm–3:25pm
Chair: Sourav S. Bhowmick (Nanyang Technological University)

2A1: *HDRF: Stream-Based Partitioning for Power-Law Graphs*
Fabio Petroni, Leonardo Querzoni (Sapienza University of Rome); Khuzaima Daudjee, Shahin Kamali (University of Waterloo); Giorgio Iacoboni (Sapienza University of Rome).

2A2: *Towards Scale-Out Capability on Social Graphs*
Haichuan Shang (NIICT Japan & University of Tokyo); Xiang Zhao (National University of Defense Technology China); Uday Kiran (NIICT Japan & University of Tokyo); Masaru Kitsuregawa (NII Japan & University of Tokyo).

2A3: *Identifying Top-k Structural Hole Spanners in Large Network*
Mojtaba Rezvani, Weifa Liang (Australian National University); Wenzheng Xu (Sun Yat-Sen University); Chengfei Liu (Swinburne University of Technology).

2A4: *Scalable Facility Location for Massive Graphs on Pregel-Like Systems*
Venkata Rama Kiran Garimella, Gianmarco De Francisci Morales, Aristides Gionis (Aalto University); Mauro Sozio (Télécom Paristech).

2B: Retrieval Algorithms

Room: 103
Time: Tuesday, 1:45pm–3:25pm
Chair: Guido Zuccon (Queensland University of Technology)

2B1: *Rank by Time or by Relevance? Revisiting Email Search*
David Carmel, Yoelle Maarek, Liane Lewin-Eytan, Ariel Raviv, Guy Halawi (Yahoo Labs).

2B2: *On the Cost of Extracting Proximity Features for Term-Dependency Models*
Xiaolu Lu (RMIT University); Alistair Moffat (The University of Melbourne); J. Shane Culpepper (RMIT University).

2B3: *An Optimization Framework for Merging Multiple Result Lists*
Chia-Jung Lee, Qingyao Ai, Bruce Croft, Daniel Sheldon (University of Massachusetts Amherst).

2B4: *Searching and Stopping: An Analysis of Stopping Rules and Strategies*
David Maxwell, Leif Azzopardi (University of Glasgow); Kalervo Järvelin, Heikki Keskustalo (University of Tampere).

2C: Text Analysis

Room: 104
Time: Tuesday, 1:45pm–3:25pm
Chair: Krisztian Balog (University Of Stavanger)

2C1: *Automated News Suggestions for Populating Wikipedia Entity Pages*
Besnik Fetahu (L3S Research Center); Katja Markert (L3S Research Center & University of Leeds); Avishek Anand (L3S Research Center).

2C2: *Mining Coordinated Intent Representation for Entity Search and Recommendation*
Huizhong Duan (Walmart Labs); Chengxiang Zhai (University of Illinois Urbana-Champaign).

2C3: *Sentiment Extraction by Leveraging Aspect-Opinion Association Structure*
Li Zhao, MinLie Huang (Tsinghua University); Jiashen Sun, Hengliang Luo (Samsung Research China); Xiankai Yang (Beijing University of Posts and Telecommunications); Xiaoyan Zhu (Tsinghua University).

2C4: *Leveraging Joint Interactions for Credibility Analysis in News Communities*
Subhabrata Mukherjee, Gerhard Weikum (Max Planck Institute for Informatics).

2D: Clustering

Room: 105
Time: Tuesday, 1:45pm–3:25pm
Chair: Ravi Kumar (Google)

2D1: *Clustering-Based Active Learning on Sensor Type Classification in Buildings*
Dezhi Hong, Hongning Wang, Kamin Whitehouse (University of Virginia).

2D2: *gSparsify: Graph Motif-Based Sparsification for Graph Clustering*
Peixiang Zhao (Florida State University).

2D3: *Incomplete Multi-View Clustering Via Subspace Learning*
Qiyue Yin, Shu Wu, Liang Wang (Chinese Academy of Sciences).

2D4: *Robust Subspace Clustering Via Tighter Rank Approximation*
Zhao Kang, Chong Peng, Qiang Cheng (Southern Illinois University).

2E: Users and Predictions

Room: 106
Time: Tuesday, 1:45pm–3:25pm
Chair: James Caverlee (Texas A&M University)

2E1: *Interactive User Group Analysis*
Behrooz Omidvar-Tehrani, Sihem Amer-Yahia (Université de Grenoble Alpes & LIG CNRS France); Alexandre Termier (IRISA France).

2E2: *Viewability Prediction for Online Display Ads*

Chong Wang (*New Jersey Institute of Technology*); Achir Kalra (*Forbes Group*); Cristian Borcea, Yi Chen (*New Jersey Institute of Technology*).

2E3: *10 Bits of Surprise: Detecting Malicious Users with Minimum Information*
Reza Zafarani (*Syracuse University*); Huan Liu (*Arizona State University*).

2E4: *MAPer: A Multi-Scale Adaptive Personalized Model for Temporal Human Behavior Prediction*
Sarah Masud Preum, John Stankovic, Yanjun Qi (*University of Virginia*).

2F: Heterogeneous Networks

Room: 107

Time: Tuesday, 1:45pm–3:25pm

Chair: Michael Quan Z. Sheng (*The University of Adelaide*)

2F1: *Classification with Active Learning and Meta-Paths in Heterogeneous Information Networks*

Chang Wan, Xiang Li, Ben Kao (*The University of Hong Kong*); Yu Xiao, Quanquan Gu (*University of Illinois Urbana-Champaign*); David Cheung (*The University of Hong Kong*); Jiawei Han (*University of Illinois Urbana-Champaign*).

2F2: *Semantic Path Based Personalized Recommendation on Weighted Heterogeneous Information Networks*

Chuan Shi, Zhiqiang Zhang (*Beijing University of Posts and Telecommunications*); Ping Luo (*Chinese Academy of Sciences*); Philip S. Yu (*University of Illinois Chicago*); Yading Yue (*Tencent*); Bin Wu (*Beijing University of Posts and Telecommunications*).

2F3: *A Graph-Based Recommendation Across Heterogeneous Domains*

Deqing Yang (*Fudan University*); Jingrui He (*Arizona State University*); Huazheng Qin, Yanghua Xiao, Wei Wang (*Fudan University*).

2F4: *Query Relaxation Across Heterogeneous Data Sources*

Verena Kantere (*University of Geneva*); George Orfanoudakis (*National Technical University of Athens*); Anastasios Kementsietsidis (*Google*); Timos Sellis (*RMIT University*).

Tuesday, 3:55pm–5:10pm, Session 3

3A: Veracity

Room: 101/102

Time: Tuesday, 3:55pm–5:10pm

Chair: Laure Berti-Équille (*Qatar Computing Research Institute*)

3A1: *Approximated Summarization of Data Provenance*

Eleanor Ainy (*Tel Aviv University*); Pierre Bourhis (*CNRS France*); Susan Davidson (*University of Pennsylvania*); Daniel Deutch, Tova Milo (*Tel Aviv University*).

3A2: *An Integrated Bayesian Approach for Effective Multi-Truth Discovery*

Xianzhi Wang, Quan Z. Sheng, Xiu Susie Fang, Lina Yao (*The University of Adelaide*); Xiaofei Xu (*Harbin Institute of Technology*); Xue Li (*The University of Queensland*).

3A3: *Approximate Truth Discovery Via Problem Scale Reduction*

Xianzhi Wang, Quan Z. Sheng, Xiu Susie Fang (*The University of Adelaide*); Xiaofei Xu (*Harbin Institute of Technology*); Xue Li (*The University of Queensland*); Lina Yao (*The University of Adelaide*).

3B: Social Networks 1

Room: 103

Time: Tuesday, 3:55pm–5:10pm

Chair: Niloy Ganguly (*Indian Institute of Technology Kharagpur*)

3B1: *Organic or Organized? Exploring URL Sharing Behavior*

Cheng Cao, James Caverlee (Texas A&M University); Kyumin Lee, Jinwook Chung (Utah State University); Hancheng Ge (Texas A&M University).

3B2: *Mining Brokers in Dynamic Social Networks*

Chonggang Song, Wynne Hsu, Mong Li Lee (National University of Singapore).

3B3: *Who Will You “@”?*

Yeyun Gong, Qi Zhang, Xuyang Sun, Xuanjing Huang (Fudan University).

3C: Query Completion

Room: 104

Time: Tuesday, 3:55pm–5:10pm

Chair: Maarten de Rijke (University of Amsterdam)

3C1: *Characterizing and Predicting Voice Query Reformulation*

Ahmed Hassan (Microsoft Research); Ranjitha Gurunath Kulkarni, Umut Ozertem, Rosie Jones (Microsoft).

3C2: *A Hierarchical Recurrent Encoder-Decoder for Generative Context-Aware Query Suggestion*

Alessandro Sordoni, Yoshua Bengio (Université de Montréal); Hossein Vahabi (Yahoo Labs); Christina Lioma, Jakob Grue Simonsen (University of Copenhagen); Jian-Yun Nie (Université de Montréal).

3C3: *A Network-Aware Approach for Searching As-You-Type in Social Media*

Paul Lagrée, Bogdan Cautis (Université Paris-Sud); Hossein Vahabi (Yahoo Labs).

3D: Microblogs

Room: 105

Time: Tuesday, 3:55pm–5:10pm

Chair: Antoine Doucet (Université de La Rochelle)

3D1: *Improving Microblog Retrieval with Feedback Entity Model*

Feifan Fan, Runwei Qiang, Chao Lv, Jianwu Yang (Peking University).

3D2: *Extracting Situational Information from Microblogs During Disaster Events: A Classification-Summarization Approach*

Koustav Rudra, Subham Ghosh, Niloy Ganguly, Pawan Goyal (Indian Institute of Technology Kharagpur); Saptarshi Ghosh (IIST Shibpur & Max Planck Institute for Software Systems).

3D3: *Profession-Based Person Search in Microblogs: Using Seed Sets to Find Journalists*

Mossaab Bagdouri, Douglas W. Oard (University of Maryland).

3E: Graph-Based Analysis

Room: 106

Time: Tuesday, 3:55pm–5:10pm

Chair: Lina Yao (The University of Adelaide)

3E1: *Learning Entity Types from Query Logs Via Graph-Based Modeling*

Jingyuan Zhang (University of Illinois Chicago); Roger Jie Luo, Altaf Rahman (Yahoo Labs); Sihong Xie (University of Illinois Chicago); Yi Chang (Yahoo Labs); Philip S. Yu (University of Illinois Chicago).

3E2: *Collaborative Prediction for Multi-Entity Interaction with Hierarchical Representation*

Qiang Liu, Shu Wu, Liang Wang (Chinese Academy of Sciences).

3E3: *Learning to Represent Knowledge Graphs with Gaussian Embedding*

Shizhu He, Kang Liu, Jun Zhao (Chinese Academy of Sciences).

3F: Classification 1

Room: 107

Time: Tuesday, 3:55pm–5:10pm

Chair: Alexandra Uitdenbogerd (*MIT University*)

3F1: *Associative Classification with Statistically Significant Positive and Negative Rules*

Jundong Li, Osmar Zaiane (*University of Alberta*).

3F2: *A Min-Max Optimization Framework for Online Graph Classification*

Peng Yang, Peilin Zhao (*Institute for Infocomm Research*).

3F3: *An Inference Approach to Basic Level of Categorization*

Zhongyuan Wang (*Renmin University of China & Microsoft Research Asia*); Haixun Wang (*Facebook*); Ji-Rong Wen (*Renmin University of China*); Yanghua Xiao (*Fudan University*).

Tuesday, 5:15pm–7:00pm, Poster Session and Reception

Room: Level 1 Foyer

Time: Tuesday, 5:15pm–7:00pm

Wednesday, 9:00am–10:00am, Keynote: Xiaofang Zhou

Room: 105/106

Time: Wednesday, 9:00am–10:00am

Chair: James Bailey (*The University of Melbourne*)

Making Sense of Spatial Trajectories

Wednesday, 10:30am–12:10pm, Session 4

4A: Location-Based Services

Room: 101/102

Time: Wednesday, 10:30am–12:10pm

Chair: Timos Sellis (*RMIT University*)

4A1: *ReverseCloak: Protecting Multi-Level Location Privacy Over Road Networks*

Chao Li, Balaji Palanisamy (*University of Pittsburgh*).

4A2: *GLUE: A Parameter-Tuning-Free Map Updating System*

Hao Wu, Chuanchuan Tu, Weiwei Sun (*Fudan University*); Baihua Zheng (*Singapore Management University*); Hao Su, Wei Wang (*Fudan University*).

4A3: *A Cost-Based Method for Location-Aware Publish/Subscribe Services*

Minghe Yu, Guoliang Li, Jianhua Feng (*Tsinghua University*).

4A4: *Probabilistic Forecasts of Bike-Sharing Systems for Journey Planning*

Nicolas Gast, Guillaume Massonnet (*INRIA Grenoble*); Daniël Reijnders (*University of Edinburgh*); Mirco Tribastone (*IMT Institute for Advanced Studies Lucca*).

4B: Query Explanation

Room: 103

Time: Wednesday, 10:30am–12:10pm

Chair: Sebastian Link (*The University of Auckland*)

4B1: *Efficient Computation of Polynomial Explanations of Why-Not Questions*

Aikaterini Tzompanaki (*Université Paris-Sud*); Melanie Herschel (*University of Stuttgart*); Nicole Bidoit (*Université Paris-Sud*).

4B2: *Interruption-Sensitive Empty Result Feedback: Rethinking the Visual Query Feedback Paradigm for Semistructured Data*

Sourav S. Bhowmick (*Nanyang Technological University*); Curtis Dyreson (*Utah State University*); Byron Choi (*Hong Kong Baptist University*); Min Hwee Ang (*Nanyang Technological University*).

4B3: *Implementing Query Completeness Reasoning*

Werner Nutt (*Free University of Bozen-Bolzano*); Sergey Paramonov (*Katholieke Universiteit Leuven*); Ognjen Savković (*Free University of Bozen-Bolzano*).

4B4: *Towards Scalable and Complete Query Explanation with OWL 2 EL Ontologies*

Zhe Wang, Mahsa Chitsaz, Kewen Wang (*Griffith University*); Jianfeng Du (*Guangdong University of Foreign Studies*).

4C: Crowds

Room: 104

Time: Wednesday, 10:30am–12:10pm

Chair: Falk Scholer (*RMIT University*)

4C1: *Crowdsourcing Pareto-Optimal Object Finding by Pairwise Comparisons*

Abolfazl Asudeh, Gensheng Zhang, Naeemul Hassan, Chengkai Li, Gergely Zaruba (*University of Texas Arlington*).

4C2: *Practical Aspects of Sensitivity in Online Experimentation with User Engagement Metrics*

Alexey Drutsa, Anna Ufliand, Gleb Gusev (*Yandex*).

4C3: *Generalized Team Draft Interleaving*

Eugene Kharitonov (*Yandex*); Craig Macdonald (*University of Glasgow*); Pavel Serdyukov (*Yandex*); Iadh Ounis (*University of Glasgow*).

4C4: *Exploiting Document Content for Efficient Aggregation of Crowdsourcing Votes*

Martin Davtyan, Carsten Eickhoff, Thomas Hofmann (*ETH Zurich*).

4D: Optimization

Room: 105

Time: Wednesday, 10:30am–12:10pm

Chair: Xuan Vinh Nguyen (*The University of Melbourne*)

4D1: *L2Knnng: Fast Exact K-Nearest Neighbor Graph Construction with L2-Norm Pruning*

David Anastasiu, George Karypis (*University of Minnesota*).

4D2: *Lingo: Linearized Grassmannian Optimization for Nuclear Norm Minimization*

Qian Li, Wenjia Niu (*Chinese Academy of Sciences*); Gang Li (*Deakin University*); Yanan Cao, Jianlong Tan, Li Guo (*Chinese Academy of Sciences*).

4D3: *Deep Collaborative Filtering Via Marginalized Denoising Auto-Encoder*

Sheng Li (*Northeastern University*); Jaya Kawale (*Adobe Research*); Yun Fu (*Northeastern University*).

4D4: *Improving Latent Factor Models Via Personalized Feature Projection for One Class Recommendation*

Tong Zhao (*The Chinese University of Hong Kong*); Julian McAuley (*University of California San Diego*); Irwin King (*The Chinese University of Hong Kong*).

4E: Social Networks 2

Room: 106

Time: Wednesday, 10:30am–12:10pm

Chair: Hongzhi Yin (*The University of Queensland*)

4E1: *Node Immunization Over Infectious Period*

Chonggang Song, Wynne Hsu, Mong Li Lee (*National University of Singapore*).

4E2: *Enterprise Social Link Recommendation*

Jiawei Zhang (*University of Illinois Chicago*); Yuanhua Lv (*Microsoft*); Philip S. Yu (*University of Illinois Chicago*).

4E3: *Exploiting Game Theoretic Analysis for Link Recommendation in Social Networks*

Tong Zhao (*The Chinese University of Hong Kong*); H. Vicky Zhao (*University of Alberta*); Irwin King (*The Chinese University of Hong Kong*).

4E4: *Extracting Interest Tags for Non-Famous Users in Social Network*

Wei He (*Renmin University of China*); Hongyan Liu (*Tsinghua University*); Jun He, Shu Tang, Xiaoyong Du (*Renmin University of China*).

4F: Matrix Factorization

Room: 107

Time: Wednesday, 10:30am–12:10pm

Chair: Jeffrey Chan (*MIT University*)

4F1: *Robust Capped Norm Nonnegative Matrix Factorization*

Hongchang Gao, Feiping Nie (*University of Texas Arlington*); Weidong Cai (*University of Sydney*); Heng Huang (*University of Texas Arlington*).

4F2: *MF-Tree: Matrix Factorization Tree for Large Multi-Class Learning*

Lei Liu (*HP Labs*); Pang-Ning Tan, XI LIU (*Michigan State University*).

4F3: *GraRep: Learning Graph Representations with Global Structural Information*

Shaosheng Cao (*Xidian University*); Wei Lu (*Singapore University of Technology and Design*); Qiongkai Xu (*IBM China*).

4F4: *Context-Adaptive Matrix Factorization for Multi-Context Recommendation*

Tong Man, Huawei Shen (*Chinese Academy of Sciences*); Junming Huang (*University of Electronic Science and Technology China*); Xueqi Cheng (*Chinese Academy of Sciences*).

Wednesday, 1:45pm–3:25pm, Session 5

5A: Trips and Trajectories

Room: 101/102

Time: Wednesday, 1:45pm–3:25pm

Chair: Iadh Ounis (*University of Glasgow*)

5A1: *Personalized Trip Recommendation with POI Availability and Uncertain Traveling Time*

Chenyi Zhang, Hongwei Liang, Ke Wang (*Simon Fraser University*); Jianling Sun (*Zhejiang University*).

5A2: *Range Search on Uncertain Trajectories*

Liming Zhan (*University of New South Wales*); Ying Zhang (*University of Technology Sydney*); Wenjie Zhang, Xiaoyang Wang, Xuemin Lin (*University of New South Wales*).

5A3: *Efficient Computation of Trips with Friends and Families*

Tanzima Hashem, Sukarna Barua, Mohammed Eunus Ali (*Bangladesh University of Engineering and Technology*); Lars Kulik, Egemen Tanin (*The University of Melbourne*).

5A4: *Sampling Big Trajectory Data*

Yanhua Li (*Worcester Polytechnic Institute*); Chi-Yin Chow (*City University of Hong Kong*); Ke Deng (*MIT University*); Mingxuan Yuan (*Huawei Noah's Ark Lab*); Jia Zeng (*Soochow University & Huawei Noah's Ark Lab*); Jia-Dong Zhang (*City University of Hong Kong*); Qiang Yang (*Hong Kong University of Science and Technology*); Zhi-Li Zhang (*University of Minnesota*).

5B: Retrieval Enhancements 1

Room: 103

Time: Wednesday, 1:45pm–3:25pm

Chair: J. Shane Culpepper (*MIT University*)

5B1: *EsdRank: Connecting Query and Documents Through External Semi-Structured Data*

Chenyang Xiong, Jamie Callan (*Carnegie Mellon University*).

5B2: *A Probabilistic Framework for Temporal User Modeling on Microblogs*

Jitao Sang (*Chinese Academy of Sciences*); Dongyuan Lu (*National University of Singapore*); Changsheng Xu (*Chinese Academy of Sciences*).

5B3: *Deriving Intensional Descriptions for Web Services*

Maria Koutraki (*Université de Versailles*); Dan Vodislav (*Université de Cergy-Pontoise*); Nicoleta Preda (*Université de Versailles*).

5B4: *An Optimization Framework for Propagation of Query-Document Features by Query Similarity Functions*

Maxim Zhukovskiy, Tsimafei Khatkevich, Gleb Gusev, Pavel Serdyukov (*Yandex*).

5C: Privacy

Room: 104

Time: Wednesday, 1:45pm–3:25pm

Chair: James Thom (*RMIT University*)

5C1: *Rank Consistency Based Multi-View Learning: A Privacy-Preserving Approach*

Han-Jia Ye, De-Chuan Zhan, Yuan Miao, Yuan Jiang, Zhi-Hua Zhou (*Nanjing University*).

5C2: *Differentially Private Histogram Publication for Dynamic Datasets: A Distance-Based Sampling Approach*

Haoran Li, Li Xiong (*Emory University*); Xiaoqian Jiang (*University of California San Diego*); Jinfei Liu (*Emory University*).

5C3: *WaveCluster with Differential Privacy*

Ling Chen (*North Carolina State University*); Ting Yu (*Qatar Computing Research Institute*); Rada Chirkova (*North Carolina State University*).

5C4: *Process-Driven Data Privacy*

Weiyi Xia (*Vanderbilt University*); Murat Kantarcioglu (*University of Texas Dallas*); Zhiyu Wan, Raymond Heatherly, Yevgeniy Vorobeychik, Bradley Malin (*Vanderbilt University*).

5D: Data Streams

Room: 105

Time: Wednesday, 1:45pm–3:25pm

Chair: Anthony Wirth (*The University of Melbourne*)

5D1: *Unsupervised Feature Selection on Data Streams*

Hao Huang (*GE Global Research*); Shinjae Yoo (*Brookhaven National Laboratory*); Shiva Kasiviswanathan (*Samsung Research America*).

5D2: *Unsupervised Streaming Feature Selection in Social Media*

Jundong Li (*Arizona State University*); Xia Hu (*Texas A&M University*); Jiliang Tang (*Yahoo Labs*); Huan Liu (*Arizona State University*).

5D3: *Weighted Similarity Estimation in Data Streams*

Konstantin Kutzkov, Mohamed Ahmed, Sofia Nikitaki (*NEC Laboratories Europe*).

5D4: *Private Analysis of Infinite Data Streams Via Retroactive Grouping*

Rui Chen, Yilin Shen, Hongxia Jin (*Samsung Research America*).

5E: Classification 2

Room: 106

Time: Wednesday, 1:45pm–3:25pm

Chair: Ping Luo (*Chinese Academy of Sciences*)

5E1: *Parallel Lazy Semi-Naive Bayes Strategies for Effective and Efficient Document Classification*

Felipe Viegas (*UFMG Brazil*); Leonardo Rocha (*UFSJ Brazil*); Wellington Martins (*UFG Brazil*); Marcos Gonçalves (*UFMG Brazil*).

5E2: *A Novel Class Noise Estimation Method and Application in Classification*

Lin Gui (*Harbin Institute of Technology*); Qin Lu (*The Hong Kong Polytechnic University*); Ruifeng Xu (*Harbin Institute of Technology*); Ming-lei Li (*The Hong Kong Polytechnic University*); Qikang Wei (*Harbin Institute of Technology*).

5E3: *Learning Task Grouping Using Supervised Task Space Partitioning in Lifelong Multitask Learning*
Meenakshi Mishra, Luke Huan (*University of Kansas*).

5E4: *KSGM: Keynode-Driven Scalable Graph Matching*

Xilun Chen, Selcuk Candan (*Arizona State University*); Maria Luisa Sapino (*University of Torino*); Paulo Shakarian (*Arizona State University*).

5F: Sentiment and Content Analysis

Room: 107

Time: Wednesday, 1:45pm–3:25pm

Chair: Ke Deng (*MIT University*)

5F1: *Protecting Your Children from Inappropriate Content in Mobile Apps: An Automatic Maturity Rating Framework*

Bing Hu (*Samsung Research America*); Bin Liu (*Rutgers University*); Neil Zhenqiang Gong (*University of California Berkeley & Iowa State University*); Deguang Kong, Hongxia Jin (*Samsung Research America*).

5F2: *The Role of Query Sessions in Interpreting Compound Noun Phrases*

Marius Paşca (*Google*).

5F3: *Deep Semantic Frame-Based Deceptive Opinion Spam Analysis*

Seongsoo Kim, Hyeokyoong Chang, Seongwoon Lee, Minhwan Yu, Jaewoo Kang (*Korea University*).

5F4: *Topic Modeling in Semantic Space with Keywords*

Xiaojia Pu (*Nanjing University*); Rong Jin (*Michigan State University & Alibaba Group*); Gangshan Wu (*Nanjing University*); Dingyi Han, Gui-Rong Xue (*Alibaba Group*).

Wednesday, 3:55pm–5:10/5:35pm, Session 6

6A: Time Series and Streams

Room: 101/102

Time: Wednesday, 3:55pm–5:10pm

Chair: Jenny Xiuzhen Zhang (*MIT University*)

6A1: *F1: Accelerating the Optimization of Aggregate Continuous Queries*

Anatoli U. Shein, Panos Chrysanthis, Alexandros Labrinidis (*University of Pittsburgh*).

6A2: *Fast Distributed Correlation Discovery Over Streaming Time-Series Data*

Tian Guo (*École Polytechnique Fédérale de Lausanne*); Saket Sathe (*IBM Research Australia*); Karl Aberer (*École Polytechnique Fédérale de Lausanne*).

6A3: *Time Series Analysis of Nursing Notes for Mortality Prediction Via State Transition Topic Model*

Yohan Jo, Natasha Loghmanpour, Carolyn Penstein Rosé (*Carnegie Mellon University*).

6B: Adaptive Learning

Room: 103

Time: Wednesday, 3:55pm–5:10pm

Chair: Damiano Spina (*MIT University*)

6B1: *Learning Relative Similarity from Data Streams: Active Online Learning Approaches*

Shuji Hao (*Nanyang Technological University*); Peilin Zhao (*Institute for Infocomm Research*); Steven Hoi (*Singapore Management University*); Chunyan Miao (*Nanyang Technological University*).

6B2: *Ad Hoc Monitoring of Vocabulary Shifts Over Time*

Tom Kenter, Maarten de Rijke (*University of Amsterdam*); Pim Huijnen, Melvin Wevers (*University of Utrecht*).

6B3: *Balancing Novelty and Saliency: Adaptive Learning to Rank Entities for Timeline Summarization of High-Impact Events*
Tuan Tran, Claudia Nederec, Nattiya Kanhabua, Ujwal Gadiraju, Avishek Anand (*L3S Research Center*).

6C: Points-Of-Interest

Room: 104

Time: Wednesday, 3:55pm–5:10pm

Chair: Egemen Tanin (*The University of Melbourne*)

6C1: *Location-Based Influence Maximization in Social Networks*

Tao Zhou, Jiuxin Cao, Bo Liu, Shuai Xu, Ziqing Zhu, Junzhou Luo (*Southeast University*).

6C2: *A Location and Time Aware Social Collaborative Retrieval Approach for New Successive Point-Of-Interest Recommendation*

Wei Zhang, Jianyong Wang (*Tsinghua University*).

6C3: *Where You Instagram? Associating Your Instagram Photos with Points of Interest*

Xutao Li, Tuan-Anh Nguyen Pham, Gao Cong, Quan Yuan (*Nanyang Technological University*); Xiaoli Li, Shonali Krishnaswamy (*Institute for Infocomm Research*).

6D: Matrices

Room: 105

Time: Wednesday, 3:55pm–5:10pm

Chair: Weidong Cai (*The University of Sydney*)

6D1: *Gradient-Based Signatures for Efficient Similarity Search in Large-Scale Multimedia Databases*

Christian Beecks, Merih Seran Uysal, Judith Hermanns, Thomas Seidl (*RWTH Aachen University*).

6D2: *Cross-Modal Similarity Learning: A Low Rank Bilinear Formulation*

Cuicui Kang, Shengcai Liao, Yonghao He, Jian Wang, Wenjia Niu, Shiming Xiang, Chunhong Pan (*Chinese Academy of Sciences*).

6D3: *Efficient Sparse Matrix Multiplications on GPU for Large Social Network Analysis*

Yong-Yeon Jo, Sang-Wook Kim, Duck-Ho Bae (*Hanyang University*).

6E: Citation Networks

Room: 106

Time: Wednesday, 3:55pm–5:10pm

Chair: Zhifeng Bao (*RMIT University*)

6E1: *The Role of Citation Context in Predicting Long-Term Citation Profiles: An Experimental Study Based on a Massive Bibliographic Text Dataset*

Mayank Singh, Vikas Patidar, Suhansanu Kumar, Tanmoy Chakraborty, Animesh Mukherjee, Pawan Goyal (*Indian Institute of Technology Kharagpur*).

6E2: *Discovering Canonical Correlations Between Topical and Topological Information in Document Networks*

Yuan He, Cheng Wang, Changjun Jiang (*Tongji University*).

6E3: *Chronological Citation Recommendation with Information-Need Shifting*

Zhuoren Jiang (*Peking University & Dalian Maritime University*); Xiaozhong Liu (*Indiana University Bloomington*); Liangcai Gao (*Peking University*).

6F: Knowledge Bases

Room: 107

Time: Wednesday, 3:55pm–5:35pm

Chair: Vanessa Murdock (*Microsoft*)

6F1: *Answering Questions with Complex Semantic Constraints on Open Knowledge Bases*

Pengcheng Yin (*The University of Hong Kong*); Nan Duan (*Microsoft Research Asia*); Ben Kao (*The University of Hong Kong*); Junwei Bao (*Harbin Institute of Technology*); Ming Zhou (*Microsoft Research Asia*).

6F2: *Inducing Space Dirichlet Process Mixture Large-Margin Entity Relationship Inference in Knowledge Bases*

Sotirios Chatzis (*Cyprus University of Technology*).

6F3: *Semi-Automated Exploration of Data Warehouses*

Thibault Sellam (*Centrum Wiskunde & Informatica*); Emmanuel Müller (*Karlsruhe Institute of Technology*); Martin Kersten (*Centrum Wiskunde & Informatica*).

6F4: *Large-Scale Knowledge Base Completion: Inferring Via Grounding Network Sampling Over Selected Instances*

Zhuoyu Wei, Jun Zhao, Kang Liu, Zhenyu Qi, Zhengya Sun, Guanhua Tian (*Chinese Academy of Sciences*).

Wednesday, 7:00pm–10:30pm, Conference Banquet

Room: Melbourne Aquarium

Time: Wednesday, 7:00pm–10:30pm

Thursday, 9:00am–10:00am, Industry Track Keynote: Andrew Tomkins

Room: 105/106

Time: Thursday, 9:00am–10:00am

Chair: Shonali Krishnaswamy (*Institute for Infocomm Research*)

Large-Scale Analysis of Dynamics of Choice among Discrete Alternatives

Thursday, 10:30–12:10pm, Industry 2 and Session 7

Industry 2:

Room: 106

Time: Thursday, 10:30–12:10pm

Chair: Wei-Ying Ma (*Microsoft Research Asia*)

I2a: *Machine Learning, Data Science, Why Bother?*

Igor Perisic (*LinkedIn*).

I2b: *Pivoting Gracefully Under Pressure: Data-Science Led Innovation in the Telecom Industry*

Amy Shi-Nash (*SingTel DataSpark*).

7A: Database Optimization

Room: 101/102

Time: Thursday, 10:30–12:10pm

Chair: Sven Helmer (*Free University of Bozen-Bolzano*)

7A1: *On Gapped Set Intersection Size Estimation*

Chen Chen, Jianbin Qin, Wei Wang (*University of New South Wales*).

7A2: *Inclusion Dependencies Reloaded*

Henning Koehler (*Massey University*); Sebastian Link (*The University of Auckland*).

7A3: *Comprehensible Models for Reconfiguring Enterprise Relational Databases to Avoid Incidents*

Ioana Giurgiu, Mirela Botezatu, Dorothea Wiesmann (*IBM Research Zurich*).

7A4: *An Optimal Online Algorithm for Retrieving Heavily Perturbed Statistical Databases in the Low-Dimensional Querying Model*

Krzysztof Choromanski, Afshin Rostamizadeh, Umar Syed (*Google*).

7B: Retrieval Enhancements 2

Room: 103

Time: Thursday, 10:30–12:10pm

Chair: Mark Sanderson (*RMIT University*)

7B1: *Aggregation of Crowdsourced Ordinal Assessments and Integration with Learning to Rank: A Latent Trait Model*

Pavel Metrikov, Virgil Pavlu, Javed Aslam (*Northeastern University*).

7B2: *Weakly Supervised Natural Language Processing Framework for Abstractive Multi-Document Summarization*

Peng Li (*University of Texas Arlington*); Weidong Cai (*University of Sydney*); Heng Huang (*University of Texas Arlington*).

7B3: *Short Text Similarity with Word Embeddings*
Tom Kenter, Maarten de Rijke (*University of Amsterdam*).

7B4: *Building Representative Composite Items*
Vincent Leroy, Sihem Amer-Yahia, Eric Gaussier, Hamid Mirisaei (*Université de Grenoble Alpes & LIG CNRS France*).

7C: Search Mechanisms

Room: 104
Time: Thursday, 10:30–12:10pm
Chair: Justin Zobel (*The University of Melbourne*)

7C1: *More Accurate Question Answering on Freebase*
Hannah Bast, Elmar Haussmann (*University of Freiburg*).

7C2: *Improving Ranking Consistency for Web Search by Leveraging a Knowledge Base and Search Logs*
Jyun-Yu Jiang (*National Taiwan University*); Jing Liu, Chin-Yew Lin (*Microsoft Research*); Pu-Jen Cheng (*National Taiwan University*).

7C3: *Assessing the Impact of Syntactic and Semantic Structures for Answer Passages Reranking*
Kateryna Tymoshenko (*University of Trento*); Alessandro Moschitti (*Qatar Computing Research Institute*).

7C4: *Ranking Entities for Web Queries Through Text and Knowledge*
Michael Schuhmacher, Laura Dietz, Simone Ponzetto (*University of Mannheim*).

7D: Social Networks 3

Room: 107
Time: Thursday, 10:30–12:10pm
Chair: Carsten Eickhoff (*ETH Zurich*)

7D1: *What Is a Network Community? A Novel Quality Function and Detection Algorithms*
Atsushi Miyauchi, Yasushi Kawase (*Tokyo Institute of Technology*).

7D2: *DifRec: A Social-Diffusion-Aware Recommender System*
Hossein Vahabi (*Yahoo Labs Spain*); Iordanis Koutsopoulos (*Athens University of Economics and Business & CERTH Greece*);
Francesco Gullo (*Yahoo Labs Spain*); Maria Halkidi (*University of Piraeus*).

7D3: *Who with Whom and How? Extracting Large Social Networks Using Search Engines*
Stefan Siersdorfer, Philipp Kemkes (*L3S Research Center*); Hanno Ackermann (*Leibniz University Hannover*); Sergej Zerr (*L3S Research Center*).

7D4: *Modeling Individual-Level Infection Dynamics Using Social Network Information*
Suppawong Tuarob, Conrad Tucker, Marcel Salathe, Nilam Ram (*Pennsylvania State University*).

Thursday, 12:15pm–1:30pm, CIKM Business Meeting

Room: Level 1 Foyer for lunch, the Room 106 from 1:00pm
Time: Thursday, 12:15pm–1:30pm
Chair: Jimi Shanahan, James Bailey, Alistair Moffat

Presentation of Best Papers Awards, sponsored by Microsoft Research; Presentation of CIKM Data Competition Prize, sponsored by Sportsbet; Proposals for future CIKM conferences.

Thursday, 1:45pm–3:25pm, Industry 3 and Session 8

Industry 3:

Room: 106

Time: Thursday, 1:45pm–3:25pm

Chair: Amy Shi-Nash (*SingTel DataSpark*)

I3a: *An Overview of (some) Machine Learning at Facebook*

Sofus A. Macskassy (*Facebook*).

I3b: *Building a Better Connected World with Data Mining and Artificial Intelligence Technologies*

Hang Li (*Huawei Noah's Ark*).

8A: Query Evaluation

Room: 101/102

Time: Thursday, 1:45pm–3:25pm

Chair: Yiqun Liu (*Tsinghua University*)

8A1: *Finding Probabilistic k -Skyline Sets on Uncertain Data*

Jinfei Liu, Haoyu Zhang, Li Xiong, Haoran Li (*Emory University*); Jun Luo (*Chinese Academy of Sciences*).

8A2: *Ordering Selection Operators Under Partial Ignorance*

Khaled Alyoubi (*Birkbeck, University of London*); Sven Helmer (*Free University of Bozen-Bolzano*); Peter Wood (*Birkbeck, University of London*).

8A3: *Querying Temporal Drifts at Multiple Granularities*

Sofia Kleisarchaki, Sihem Amer-Yahia, Ahlame Douzal-Chouakria (*Université de Grenoble Alpes & LIG CNRS France*); Vassilis Christophides (*University of Crete & INRIA Paris*).

8A4: *Efficient Incremental Evaluation of Succinct Regular Expressions*

Wim Martens, Thomas Timm (*University of Bayreuth*); Henrik Björklund (*Umeå Universitet*).

8B: Web Search

Room: 103

Time: Thursday, 1:45pm–3:25pm

Chair: David Hawking (*Microsoft*)

8B1: *Struggling and Success in Web Search*

Daan Odijk (*University of Amsterdam*); Ryan W. White, Ahmed Hassan Awadallah, Susan T. Dumais (*Microsoft Research*).

8B2: *Behavioral Dynamics from the SERP's Perspective: What are Failed SERPs and How to Fix Them?*

Julia Kiseleva (*Eindhoven University of Technology*); Jaap Kamps (*University of Amsterdam*); Vadim Nikulin, Nikita Makarov (*Yandex*).

8B3: *What Users Ask a Search Engine: Analyzing One Billion Russian Question Queries*

Michael Völske (*Bauhaus-Universität Weimar*); Pavel Braslavski (*Ural Federal University*); Matthias Hagen (*Bauhaus-Universität Weimar*); Galina Lezina (*Ural Federal University*); Benno Stein (*Bauhaus-Universität Weimar*).

8B4: *Does Vertical Bring More Satisfaction? Predicting Satisfaction in a Heterogeneous Environment*

Ye Chen, Yiqun Liu (*Tsinghua University*); Ke Zhou (*Yahoo Labs London*); Meng Wang (*Hefei University of Technology*); Min Zhang, Shaoping Ma (*Tsinghua University*).

8C: Social Media 2

Room: 104

Time: Thursday, 1:45pm–3:25pm

Chair: Karin Verspoor (*The University of Melbourne*)

8C1: *Characterizing and Predicting Viral-And-Popular Video Content*

David Vallet, Dali Kaafar, Anirban Mahanti (NICTA Australia); Shlomo Berkovsky (CSIRO Australia); Sebastien Ardon (NICTA Australia).

8C2: *Social Spammer and Spam Message Co-Detection in Microblogging with Social Context Regularization*

Fangzhao Wu (Tsinghua University); Jinyun Shu (Beijing University of Posts and Telecommunications); Yongfeng Huang, Zhigang Yuan (Tsinghua University).

8C3: *Central Topic Model for Event-Oriented Topics Mining in Microblog Stream*

Min Peng, Jiahui Zhu, Xuhui Li, Jiajia Huang (Wuhan University); Hua Wang, Yanchun Zhang (Victoria University Australia).

8C4: *Video Popularity Prediction by Sentiment Propagation Via Implicit Network*

Wanying Ding, Yue Shang (Drexel University); Lifan Guo (TCL Research America); Xiaohua Hu (Drexel University); Rui Yan, Tingting He (Central China Normal University).

8D: Recommendation

Room: 107

Time: Thursday, 1:45pm–3:25pm

Chair: Gangshan Wu (Nanjing University)

8D1: *Joint Modeling of User Check-In Behaviors for Point-Of-Interest Recommendation*

Hongzhi Yin, Xiaofang Zhou (The University of Queensland); Yingxia Shao (Peking University); Hao Wang (Chinese Academy of Sciences); Shazia Sadiq (The University of Queensland).

8D2: *ORec: An Opinion-Based Point-Of-Interest Recommendation Framework*

Jia-Dong Zhang, Chi-Yin Chow (City University of Hong Kong); Yu Zheng (Microsoft).

8D3: *Toward Dual Roles of Users in Recommender Systems*

Suhang Wang, Jiliang Tang, Huan Liu (Arizona State University).

8D4: *TriRank: Review-Aware Explainable Recommendation by Modeling Aspects*

Xiangnan He, Tao Chen, Min-Yen Kan (National University of Singapore); Xiao Chen (Chinese Academy of Sciences).

Thursday, 3:55pm–4:45pm, Industry 4

Room: 106

Time: Thursday, 3:55pm–4:45pm

Chair: Shonali Krishnaswamy (Institute for Infocomm Research)

I4: *Building an Artificially Intelligent and Socially Engaging Conversation Engine*

Wei-Ying Ma (Microsoft Research Asia).

Thursday, 4:45pm–5:00pm, Conference Close

Room: 106

Time: Thursday, 4:45pm–5:00pm

Chair: James Bailey and Alistair Moffat

Friday, 9:00am–5:00pm, Tutorials and Workshops

Room: Various

Time: Friday, 9:00am–5:00pm

Chair: Various

Short Papers

Tuesday, 5:15pm–7:00pm, Poster Session and Reception

Room: Level 1 Foyer

Time: Tuesday, 5:15pm–7:00pm

Poster boards will be numbered to match this list of short papers. Poster presenters are asked to comply with that numbering scheme, so that conference attendees can readily locate the posters that they are interested in viewing. If an author is presenting two short papers, they will need to split their time between the two posters.

DB Short Papers

P01: *RoadRank: Traffic Diffusion and Influence Estimation in Dynamic Urban Road Networks*

Tarique Anwar, Chengfei Liu, Hai L. Vu, Md. Saiful Islam (*Swinburne University of Technology*).

P02: *On Query-Update Independence for SPARQL*

Nicola Guido (*INRIA Grenoble*); Pierre Genevès (*Université de Grenoble Alpes & LIG CNRS France*); Nabil Layaïda, Cécile Roisin (*INRIA Grenoble*).

P03: *A Structured Query Model for the Deep Relational Web*

Hasan Jamil (*University of Idaho*); H. V. Jagadish (*University of Michigan Ann Arbor*).

P04: *A Flash-Aware Buffering Scheme Using On-The-Fly Redo*

Kyosung Jeong, Sang-Wook Kim (*Hanyang University*); Sung-Chae Lim (*Dongduk Womens University*).

P05: *Defragging Subgraph Features for Graph Classification*

Haishuai Wang, Peng Zhang, Ivor Tsang, Ling Chen, Chengqi Zhang (*University of Technology Sydney*).

P06: *Structural Constraints for Multipartite Entity Resolution with Markov Logic Network*

Tengyuan Ye (*Zhejiang University*); Hady W. Lauw (*Singapore Management University*).

IR Short Papers

P07: *Know Your Onions: Understanding the User Experience with the Knowledge Module in Web Search*

Ioannis Arapakis (*Yahoo Labs*); Luis Leiva (*Universitat Politècnica de València*); B. Barla Cambazoglu (*Yahoo Labs*).

P08: *Personalized Federated Search at LinkedIn*

Dhruv Arya, Viet Ha-Thuc, Shakti Sinha (*LinkedIn*).

P09: *Balancing Exploration and Exploitation: Empirical Parameterization of Exploratory Search Systems*

Kumaripaba Athukorala, Alan Medlar, Kalle Ilves, Dorota Glowacka (*University of Helsinki*).

P10: *On Predicting Deletions of Microblog Posts*

Mossaab Bagdouri, Douglas W. Oard (*University of Maryland*).

P11: *Semi-Automated Text Classification for Sensitivity Identification*

Giacomo Berardi, Andrea Esuli (*ISTI-CNR Italy*); Craig Macdonald, Iadh Ounis (*University of Glasgow*); Fabrizio Sebastiani (*Qatar Computing Research Institute*).

P12: *Identification of Microblogs Prominent Users During Events by Learning Temporal Sequences of Features*

Imen Bizid, Nibal Nayef, Patrice Boursier, Antoine Doucet (*Université de La Rochelle*); Sami Faiz (*Ecole Nationale d'Ingénieurs de Tunis*).

P13: *A Real-Time Eye Tracking Based Query Expansion Approach Via Latent Topic Modeling*

Yongqiang Chen, Peng Zhang, Dawei Song, Benyou Wang (*Tianjin University*).

P14: *Clustered Semi-Supervised Relevance Feedback*

Kripabandhu Ghosh, Swapan Kumar Parui (*Indian Statistical Institute*).

P15: *On the Effect of “Stupid” Search Components on User Interaction with Search Engines*

Lidia Grauer, Aleksandra Lomakina (*Yandex*).

P16: *Social-Relational Topic Model for Social Networks*

Weiyu Guo, Shu Wu, Liang Wang, Tieniu Tan (*Chinese Academy of Sciences*).

P17: *Building Effective Query Classifiers: A Case Study in Self-Harm Intent Detection*

Ashiqur KhudaBukhsh (*Carnegie Mellon University*); Paul N. Bennett, Ryen W. White (*Microsoft Research*).

P18: *Modelling the Usefulness of Document Collections for Query Expansion in Patient Search*

Nut Limsopatham, Craig Macdonald, Iadh Ounis (*University of Glasgow*).

P19: *A Convolutional Click Prediction Model*

Qiang Liu, Feng Yu, Shu Wu, Liang Wang (*Chinese Academy of Sciences*).

P20: *A Study of Query Length Heuristics in Information Retrieval*

Yuanhua Lv (*Microsoft Research*).

P21: *Detect Rumors Using Time Series of Social Context Information on Microblogging Websites*

Jing Ma (*Beijing University of Posts and Telecommunications & The Chinese University of Hong Kong*); Wei Gao (*Qatar Computing Research Institute*); Zhongyu Wei (*University of Texas Dallas*); Yueming Lu (*Beijing University of Posts and Telecommunications*); Kam-Fai Wong (*The Chinese University of Hong Kong*).

P22: *Query Auto-Completion for Rare Prefixes*

Bhaskar Mitra, Nick Craswell (*Microsoft*).

P23: *Pooled Evaluation Over Query Variations: Users are as Diverse as Systems*

Alistair Moffat (*The University of Melbourne*); Falk Scholer (*RMIT University*); Paul Thomas (*CSIRO Australia*); Peter Bailey (*Microsoft*).

P24: *The Influence of Pre-Processing on the Estimation of Readability of Web Documents*

Joao Palotti (*Vienna University of Technology*); Guido Zuccon (*Queensland University of Technology*); Allan Hanbury (*Vienna University of Technology*).

P25: *Atypical Queries in eCommerce*

Neeraj Pradhan, Vinay Deolalikar, Kang Li (*Groupon*).

P26: *Bottom-Up Faceted Search: Creating Search Neighbourhoods with Datacube Cells*

Mark Sifer (*University of Wollongong*).

P27: *Personalized Recommendation Meets Your Next Favorite*

Qiang Song, Jian Cheng, Ting Yuan, Hanqing Lu (*Chinese Academy of Sciences*).

P28: *Recommending Short-Lived Dynamic Packages for Golf Booking Services*

Robin Swezey, Young-joo Chung (*Rakuten Institute of Technology*).

P29: *Large-Scale Question Answering with Joint Embedding and Proof Tree Decoding*

Zhenghao Wang, Shengquan Yan, Huaming Wang, Xuedong Huang (*Microsoft Research*).

P30: *Query Length, Retrievability Bias and Performance*

Colin Wilkie, Leif Azzopardi (*University of Glasgow*).

P31: *Gauging Correct Relative Rankings for Similarity Search*

Weiren Yu, Julie McCann (*Imperial College London*).

P32: *Learning User Preferences for Topically Similar Documents*

Mustafa Zengin, Ben Carterette (*University of Delaware*).

P33: *Modeling Parameter Interactions in Ranking SVM*

Yaogong Zhang (Nankai University); Jun Xu, Yanyan Lan, Jiafeng Guo (Chinese Academy of Sciences); Maoqiang Xie, Yalou Huang (Nankai University); Xueqi Cheng (Chinese Academy of Sciences).

KM Short Papers

P34: *Best First Over-Sampling for Multilabel Classification*

Xusheng Ai, Jian Wu (Soochow University); Victor S. Sheng (University of Central Arkansas); Yufeng Yao, Pengpeng Zhao, Zhiming Cui (Soochow University).

P35: *Co-Clustering Document-Term Matrices by Direct Maximization of Graph Modularity*

Melissa Ailem, François Role, Mohamed Nadif (Paris Descartes University).

P36: *A Data-Driven Approach to Distinguish Cyber-Attacks from Physical Faults in a Smart Grid*

Adnan Anwar, Abdun Mahmood, Zubair Shah (University of New South Wales).

P37: *Improving Event Detection by Automatically Assessing Validity of Event Occurrence in Text*

Andrea Ceroni, Ujwal Gadiraju, Marco Fisichella (L3S Research Center).

P38: *DAAV: Dynamic API Authority Vectors for Detecting Software Theft*

Dong-Kyu Chae, Sang-Wook Kim (Hanyang University); Seong-Je Cho, Yesol Kim (Dankook University).

P39: *Towards Multi-Level Provenance Reconstruction of Information Diffusion on Social Media*

Tom De Nies (Ghent University & iMinds); Io Taxidou (University of Freiburg); Anastasia Dimou, Ruben Verborgh (Ghent University & iMinds); Peter M. Fischer (University of Freiburg); Erik Mannens, Rik Van de Walle (Ghent University & iMinds).

P40: *Profiling Pedestrian Distribution and Anomaly Detection in a Dynamic Environment*

Tuan Doan, Sutharshan Rajasegarar, Mahsa Salehi, Masud Moshtaghi, Christopher Leckie (The University of Melbourne).

P41: *A Clustering-Based Approach to Detect Probable Outcomes of Lawsuits*

Daniel Gribel (PUC-Rio Brazil); Maira Gatti, Leonardo Azevedo (IBM Research Brazil).

P42: *Detecting Check-Worthy Factual Claims in Presidential Debates*

Naeemul Hassan, Chengkai Li, Mark Tremayne (University of Texas Arlington).

P43: *Where You Go Reveals Who You Know: Analyzing Social Ties from Millions of Footprints*

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