Research Publications - Data Mining Research Group at CS, UIUC

2019

1. Shuochao Yao, Ailing Piao, Wenjun Jiang, Yiran Zhao, Huajie Shao, Shengzhong Liu, Dongxin Liu, Jinyang Li, Tianshi Wang, Shaohan Hu, Lu Su, Jiawei Han and Tarek Abdelzaher, "STFNets: Learning Sensing Signals from the Time-Frequency Perspective with Short-Time Fourier Neural Networks", in Proc. the Web Conf. 2019 (WWW'19), San Francisco, CA, May 2019

2. Carl Yang, Huy Hoang Do, Tomas Mikolov and Jiawei Han "Place Deduplication with Embeddings", in Proc. the Web Conf. 2019 (WWW'19), San Francisco, CA, May 2019

3. Honglei Zhuang, Timothy Hanratty, and Jiawei Han, "Aspect-Based Sentiment Analysis with Minimal Guidance", in Proc. 2019 SIAM Int. Conf. on Data Mining (SDM'19), Calgary, Alberta, Canada, May 2019

4. Sha Li, Chao Zhang, Dongming Lei, Ji Li, Jiawei Han, "GeoAttn: Fine-Grained Localization of Social Media Messages via Attentional Memory Network", in Proc. 2019 SIAM Int. Conf. on Data Mining (SDM'19), Calgary, Alberta, Canada, May 2019

5. Qi Zhu, Xiang Ren, Jingbo Shang, Yu Zhang, Ahmed El-Kishky and Jiawei Han, "Integrating Local Context and Global Cohesiveness for Open Information Extraction", in Proc. 2019 ACM Int. Conf. on Web Search and Data Mining (WSDM'19), Melbourne, Australia, Feb. 2019

6. Jiaming Shen, Ruiliang Lyu, Xiang Ren, Michelle Vanni, Brian Sadler, Jiawei Han, "Mining Entity Synonyms with Efficient Neural Set Generation", in Proc. 2019 AAAI Conf. on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, Jan. 2019

7. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, "Weakly-Supervised Hierarchical Text Classification", in Proc. 2019 AAAI Conf. on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, Jan. 2019

8. Xuan Wang, Yu Zhang, Xiang Ren, Yuhaoh Zhang, Marinka Zitnik, Jingbo Shang, Curtis Langlotz, and Jiawei Han, "Cross-type Biomedical Named Entity Recognition with Deep Multi-Task Learning", Bioinformatics (accepted), Oct. 2018 (to appear 2019)

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2018

1. Xiang Ren and Jiawei Han, "Mining Structures of Factual Knowledge from Text: An Effort-Light Approach", Morgan & Claypool Publishers, 2018. (Ren's thesis: 2018 ACM SIGKDD Dissertation Award)

2. Jingbo Shang, Jialu Liu, Meng Jiang, Xiang Ren, Clare R Voss, Jiawei Han, "Automated Phrase Mining from Massive Text Corpora", IEEE Transactions on Knowledge and Data Engineering, 30(10):1825-1837 (2018)

3. Jingbo Shang, Meng Jiang, Wenzhu Tong, Jinlfeng Xiao, Jian Peng, Jiawei Han. "DPPred: An Effective Prediction Framework with Concise Discriminative Patterns", IEEE Transactions on Knowledge and Data Engineering, 30(7): 1226-1239 (2018)

4. Chenguang Wang, Yangqiu Song, Haoran Li, Ming Zhang, Jiawei Han, "Unsupervised meta-path selection for text similarity measure based on heterogeneous information networks", Data Mining and Knowledge Discovery, 32(6): 1735-1767 (2018)

5. Chao Zhang, Dongming Lei, Quan Yuan, Honglei Zhuang, Lance M. Kaplan, Shaowen Wang, Jiawei Han, "GeoBurst+: Effective and Real-Time Local Event Detection in Geo-Tagged Tweet Streams", ACM Transactions on Intelligent Systems and Technology (TIST) 9 (3): 34:1-24 (2018)

6. Wei Shen, Jiawei Han, Jianyong Wang, Xiaojie Wang, Zhenglu Yang. "SHINE+: A General Framework for Domain-Specific Entity Linking with Heterogeneous Information Networks", IEEE Transactions on Knowledge and Data Engineering, 30(2): 353-366 (2018)

7. Xuan Wang, Yu Zhang, Qi Li, Cathy Wu, and Jiawei Han, "PENNER: Pattern-enhanced Nested Named Entity Recognition in Biomedical Literature", Proc. 2018 Int. Conf. on Bioinformatics and Biomedicine (BIBM'18), Madrid, Spain, Dec. 2018

8. Qi Li, Xuan Wang, Yu Zhang, Fei Ling, Cathy Wu, and Jiawei Han, "Pattern Discovery for Wide-Window Open Information Extraction in Biomedical Literature", Proc. 2018 Int. Conf. on Bioinformatics and Biomedicine (BIBM'18), Madrid, Spain, Dec. 2018

9. Shi Zhi, Fan Yang, Zheyi Zhu, Qi Li, Zhaoruan Wang, and Jiawei Han, "Dynamic Truth Discovery on Numerical Data", in Proc. of 2018 IEEE Int. Conf. on Data Mining (ICDM'18), Singapore, Nov. 2018

10. Carl Yang, Yichen Feng, Pan Li, Yu Shi, and Jiawei Han, "Meta-Graph Based HIN Spectral Embedding: Methods, Analyses, and Insights", in Proc. of 2018 IEEE Int. Conf. on Data Mining (ICDM'18), Singapore, Nov. 2018

11. Fangbo Tao, Chao Zhang, Xiuxi Chen, Meng Jiang, Tim Hanratty, Lance Kaplan, and Jiawei Han, "Doc2Cube: Allocating Documents to Text Cube without Labeled Data", in Proc. of 2018 IEEE Int. Conf. on Data Mining (ICDM'18), Singapore, Nov. 2018

12. Doris Xin, Ahmed El-Kishky, De Liao, Brandon Neikum, and Jiawei Han, "Active Learning on Heterogeneous Information Networks: A Multi-armed Bandit Approach", in Proc. of 2018 IEEE Int. Conf. on Data Mining (ICDM'18), Singapore, Nov. 2018

13. Jingbo Shang, Liyuan Liu, Xiaotao Gu, Xiang Ren, Teng Ren and Jiawei Han, "Learning Named Entity Tagger using Domain-Specific Dictionary", in Proc. of 2018 Conf. on Empirical Methods in Natural Language Processing (EMNLP'18), Brussels, Belgium, Oct. 2018

14. Liyuan Liu, Xiang Ren, Jingbo Shang, Xiaotao Gu, Jian Peng and Jiawei Han, "Efficient Contextualized Representation: Language Model Pruning for Sequence Labeling", in Proc. of 2018 Conf. on Empirical Methods in Natural Language Processing (EMNLP'18), Brussels, Belgium, Oct. 2018

15. Quan Yuan, Xiang Ren, Wenyi He, Chao Zhang, Xinhe Geng, Lifu Huang, Heng Ji, Chin-Yew Lin and Jiawei Han, "Open-Schema Event Profiling for Massive News Corpora", in Proc. of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM'18), Turin, Italy, Oct. 2018

16. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, "Weakly-Supervised Neural Text Classification", in Proc. of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM'18), Turin, Italy, Oct. 2018

17. Jingbo Shang, Jiaming Shen, Tianhang Sun, Xingbang Liu, Anja Gruenheid, Flip Korn, Adam Lelkes, Cong Yu and Jiawei Han, "Investigating Rumor News Using Agreement-Aware Search", in Proc. of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM'18), Turin, Italy, Oct. 2018
18. Carl Yang, Mengxiong Liu, Frank He, Xikun Zhang, Jian Peng, and Jiawei Han, "Similarity Modeling on Heterogeneous Networks via Automatic Path Discovery", in Proc. of 2018 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'18), Dublin, Ireland, Sept. 2018

19. Carl Yang, Mengxiong Liu, Vincent W. Zheng and Jiawei Han, "Node, Motif and Subgraph: Leveraging Network Functional Blocks Through Structural Convolution", in Proc. of 2018 IEEE/ACM Int. Conf. on Social Networks Analysis and Mining (ASONAM'18), Barcelona, Spain, Aug. 2018

20. Xuan Wang, Yu Zhang, Qi Li, Yinlin Chen and Jiawei Han, "Open Information Extraction with Meta-pattern Discovery in Biomedical Literature", in Proc. of 2018 ACM Conf. on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB'18), Washington, DC, Aug. 2018

21. Jingbo Shang, Chao Zhang, Jiaming Shen, Jiawei Han, "Towards Multidimensional Analysis of Text Corpora", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'18), (Conference Tutorial), London, UK, Aug. 2018

22. Jingbo Shang, Qi Zhu, Jiaming Shen, Xuan Wang, Xiaotao Gu, Lance Kaplan, Timothy Harrraty and Jiawei Han, "AutoNet: Automated Network Construction and Exploration System from Domain-Specific Corpora", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'18), (demo paper), London, UK, Aug, 2018

23. Jiaming Shen*, Jinfeng Xiao*, Yu Zhang, Carl Yang, Jingbo Shang, Jinda Han, Saurabh Sinha, Peipei Ping, Richard Weinshilboum, Zhongyu Lu and Jiawei Han, "SetSearch+: Entity-Set-Aware Search and Mining for Scientific Literature", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), (demo paper), London, UK, August 2018

24. Hanwen Zha, Jiawei Han, Qingli Li, Zhengzhi Lou, Jiawei Han, "If You’re a Scientist, You’ll Be Back: Interpretable New User Clustering and Churn Prediction on a Mobile Social Application", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, August 2018

25. Chao Zhang, Fangbo Tao, Xiuxi Chen, Jiaming Shen, Meng Jiang, Brian Sadler, Michelle Vanni and Jiawei Han, "TaxoGen: Constructing Topical Concept Taxonomy by Adaptive Term Embedding and Clustering", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, August 2018

26. Qi Li, Meng Jiang, Xikun Zhang, Meng Qu, Timothy Hanrraty, Jing Gao and Jiawei Han, "TruePIE: Discovering Reliable Patterns in Pattern-Based Information Extraction", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, August 2018

27. Jiaming Shen, Zeqiu Wu, Dongming Lei, Chao Zhang, Xiang Ren, Michelle T. Vanni, Brian M. Sadler and Jiawei Han, "HiExpan: Task-Guided Taxonomy Construction by Hierarchical Tree Expansion", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, August 2018

28. Yu Shi, Qi Zhu, Fang Guo, Chao Zhang and Jiawei Han, "Easing Embedding Learning by Comprehensive Transcription of Heterogeneous Information Networks", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, August 2018

29. Yuchen Li, Zhengzhi Lou, Yu Shi and Jiawei Han, "Temporal Motifs in Heterogeneous Information Networks", in Proc. of Int. Workshop on Mining and Learning with Graphs (MLG’18), co-located with KDD’18, London, UK, August 2018

30. Meng Qu, Xiang Ren, Yu Zhang, and Jiawei Han, "Weakly-supervised Relation Extraction by Pattern-enhanced Embedding Learning", in Proc. of 2018 Int. Conf. on World-Wide Web (WWW’18), Lyon, France, Apr. 2018

31. Yu Shi, Xuan Wang, Jingbo Shang, Jinda Han, Saurabh Sinha and Jiawei Han, "Entity Set Search of Scientific Literature: An Unsupervised Ranking Approach", in Proc. of 2018 ACM SIGIR Conf. on Research and Development in Information Retrieval (SIGIR’18), Ann Arbor, MI, July 2018

32. Ahmed El-Kishky, Frank Xu, Aston Zhang, Stephen Macke and Jiawei Han, "Entropic-Based Subword Mining for Word Embeddings", in Proc. of the 2nd Workshop on Subword and Character Level Models in NLP (SCLeM’18) (at NAACL 2018), New Orleans, LA, June 2018

33. Yu Shi, Huan Gui, Qi Zhu, Lance Kaplan,Jiawei Han, "AspEm: Embedding Learning by Aspects in Heterogeneous Information Networks, Mobility Modeling", in Proc. of 2018 SIAM Int. Conf. on Data Mining (SDM’18), San Diego, CA, May 2018

34. Meng Qu, Xiang Ren, Yu Zhang, and Jiawei Han, "End-to-End Reinforcement Learning for Automatic Taxonomy Induction", in Proc. of 2018 Annual Meeting of the Association for Computational Linguistics (ACL’18), Melbourne, Australia, July 2018

35. Jingbo Shang, Jinfeng Xiao, Xinwei He, Jingbo Shang, Saurabh Sinha and Jiawei Han, "Entity Set Search of Scientific Literature: An Unsupervised Ranking Approach", in Proc. of 2018 ACM SIGIR Conf. on Research and Development in Information Retrieval (SIGIR’18), Ann Arbor, MI, July 2018

36. Liuhan Liu, Mengxiong Liu, Frank He, Xikun Zhang, Jian Peng and Jiawei Han, "Empower Sequence Labeling with Task-Aware Neural Language Model", in Proc. of 2018 AAAI Conf. on Artificial Intelligence (AAA’18), New Orleans, LA, Feb. 2018

37. Chao Zhang, Mengxiong Liu, Zhengchao Liu, Cari Yang, Luming Zhang, Jiawei Han, "Spatial-Temporal Activity Modeling Under Data Scarcity: A Graph-Regularized Cross-Modal Embedding Approach", in Proc. of 2018 AAAI Conf. on Artificial Intelligence (AAA’18), New Orleans, LA, Feb. 2018

38. Wanzheng Zhu, Chao Zhang, Shuochao Yao, Xiaobin Gao, Jiawei Han, "A Spherical Hidden Markov Model for Semantics-Rich Human Mobility Modeling", in Proc. of 2018 AAAI Conf. on Artificial Intelligence (AAA’18), New Orleans, LA, Feb. 2018

39. Zeqiu Wu, Xiang Ren, Frank F. Xu, Ji Li and Jiawei Han, "Indirect Supervision for Relation Extraction using Question-Answer Pairs", in Proc. of 2018 ACM Int. Conf. on Web Search and Data Mining (WSDM’18), Los Angeles, CA, Feb. 2018

40. Meng Qu, Jian Tang, and Jiawei Han, "Curriculum Learning for Heterogeneous Star Network Embedding via Deep Reinforcement Learning", in Proc. of 2018 ACM Int. Conf. on Web Search and Data Mining (WSDM’18), Los Angeles, CA, Feb. 2018

41. Jiawei Han, "On the Power of Massive Text Data", (keynote speech), in Proc. of 2018 ACM Int. Conf. on Web Search and Data Mining (WSDM’18), Los Angeles, CA, Feb. 2018
2. Meng Qu, Jian Tang, Jingbo Shang, Xiang Ren, Ming Zhang, Jiawei Han, "An Attention-based Collaboration Framework for Multi-View Network Representation Learning", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), Singapore, Nov. 2017

3. Chenguang Wang, Yangqiu Song, Haoan Li, Yizhou Sun, Ming Zhang, Jiawei Han, "Second-Order Heterogeneous Information Network Similarity for Text", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), Singapore, Nov. 2017

4. Quan Yuan, Jingbo Shang, Xin Cao, Chao Zhang, Xinhe Geng, Jiawei Han, "Detecting Multiple Periods and Periodic Patterns in Event Time Sequences", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), Singapore, Nov. 2017

5. Shi Zhi, Yicheng Sun, Jiayi Liu, Chenguang Wang, "ClaimVerify: A Real-time Claim Validation System Using the Web and Fact Databases", (system demo), in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), Singapore, Nov. 2017

6. Mengxiong Liu, Zhongchao Liu, Chao Zhang, Keyang Zhang, Quan Yuan, Tim Hanratty and Jiawei Han, "Urbanity: A System for Interactive Exploration of Urban Dynamics from Streaming Human Sensing Data" (system demo), in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), Singapore, Nov. 2017

7. Huan Gui, Jialiu Liu, Fangbo Tao, Meng Jiang, Brandon Norick, Lance Kaplan and Jiawei Han, "Embedding Learning with Events in Hierarchical Event Information Network", IEEE Transactions on Knowledge and Data Engineering, 29(11): 2428-2441, 2017

8. Jiaming Shen, Zeqiu Wu, Dongming Lei, Jingbo Shang, Xiang Ren, Jiawei Han, "SetExpan: Corpus-based Set Expansion via Context Feature Selection and Rank Ensemble", in Proc. of 2017 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'17), Skopje, Macedonia, Sept. 2017

9. Liuyan Liu, Xiang Ren, Qi Zhu, Shi Zhi, Huan Gui, Heng Ji and Jiawei Han, "Heterogeneous Supervision for Relation Extraction: A Representation Learning Approach", in Proc. of 2017 Conf. on Empirical Methods in Natural Language Processing (EMNLP'17), Copenhagen, Denmark, Sept. 2017

10. Honglei Zhuang, Chi Wang, Fangbo Tao, Lance Kaplan and Jiawei Han, "Identifying Semantically Deviating Outlier Documents", in Proc. of EMNLP'17 Conf. on Empirical Methods in Natural Language Processing (EMNLP'17), Copenhagen, Denmark, Sept. 2017

11. Meng Qu, Xiang Ren and Jiawei Han, "Automatic Synonym Discovery with Knowledge Bases", in Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'17), Halifax, Nova Scotia, Canada, Aug. 2017

12. Xiuli Ma, Guanguy Zhou, Jingbo Shang, Jingjing Wang, Jian Peng, and Jiawei Han, "Detection of Complexes in Biological Networks through Diversified Dense Subgraphs Mining", Journal of Computational Biology, 24 (9): 923–941, 2017

13. Chao Zhang, Keyang Zhang, Quan Yuan, Fangbo Tao, Luming Zhang, Tim Hanratty, Jiawei Han, "ReAct: Online Multimodal Embedding for Recency-Aware Spatio-temporal Activity Modeling", In Proc. of 2017 ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR'17), Tokyo, Japan, Aug. 2017

14. Chao Zhang, Mengxiong Liu, Dongming Lei, Quan Yuan, Honglei Zhuang, Jiawei Han, "GeoBurst+: Effective and Real-Time Local Event Detection in Geo-Tagged Tweet Streams", accepted by ACM Transactions on Intelligent Systems and Technology (ACM TIST), 2017

15. Jiaming Shen, Zeqiu Wu, Dongming Lei, Jingbo Shang, Xiang Ren, Jiawei Han, "ClaimVerify: A Real-time Claim Validation System Using the Web and Fact Databases", (system demo), in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), Singapore, Nov. 2017

16. Meng Qu, Xiang Ren, and Jiawei Han, "Mining Entity-Relation-Attribute Structures from Massive Text Data" (conference tutorial), Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'17), Halifax, Nova Scotia, Canada, Aug. 2017.
28. Yang Li, Shulong Tan, Huan Sun, Jiawei Han, Dan Roth and Xifeng Yan, "Entity Disambiguation with Linkless Knowledge Bases", in Proc. of 2016 Int. World-Wide Web Conf. (WWW'16), Montreal, Canada, April 2016

29. Aston Zhang, Amit Goyal, Ricardo Baeza-Yates, Yi Chang, Jiawei Han, Carl A. Gunter and Hongbo Deng, "Towards Mobile Query Auto-Completion: An Efficient Mobile Application-Aware Approach", in Proc. of 2016 Int. World-Wide Web Conf. (WWW'16), Montreal, Canada, April 2016

30. Xiuli Ma, Guangyu Zhou, Jingjing Wang, Jian Peng, and Jiawei Han, "Complexes Detection in Biological Networks via Diversified Dense Subgraphs Mining", in Proc. of 2016 Int. Conf. on Research in Computational Molecular Biology (RECOMB'16), Los Angeles, CA, Apr. 2016

31. Chenguang Wang, Yangqiu Song, Haoan Li, Ming Zhang and Jiawei Han, "Text Classification with Heterogeneous Information Network Kernels", in Proc. of 2016 AAAI Conf. on Artificial Intelligence (AAAI'16), Phoenix, AZ, Feb. 2016

32. Min Li, Jingjing Wang, Wenzhu Tong, Hongkun Yu, Xiuli Ma, Yucheng Chen, Haoyan Cai, Jiawei Han, "EKNOW: Event Knowledge from News and Opinions in Twitter", in Proc. of AAAI Conf. on Artificial Intelligence (AAAI'16) (system demo), Phoenix, AZ, Feb. 2016

33. Jingjing Wang, Min Li, Jiawei Han and Xiaolong Wang, "Modeling Check-in Preferences with Multidimensional Knowledge: A Minimax Entropy Approach", in Proc. of 2016 Int. Conf. on Web Search and Data Mining (WSDM'16), San Francisco, CA, Feb. 2016.

34. Latifur Khan "Recurring and Novel Class Detection using Class-Based Ensemble for Evolving Data Streams", IEEE Transactions on Knowledge and Data Engineering, 28(10), 2016

35. Yaliang Li, Qi Li, Jing Gao, Lu Su, Bo Zhao, Wei Fan, Jiawei Han, "Conflicts to Harmony: A Framework for Resolving Conflicts in Heterogeneous Data by Truth Discovery", IEEE Transactions on Knowledge and Data Engineering (TKDE), 28(8): 1986-1999 (2016)

36. Jun Li, Jingjing Wang, Junfei Zhang, Qiming Qin, Tanvi Jindal, Jiawei Han, "A probabilistic approach to detect mixed periodic patterns from moving object data", Geoinformatica, 2016.


38. Jinfeng Xiao, Sheng Wang, Jingbo Shang, Henery Lin, Doris Xin, Xiang Ren, Jiawei Han, and Jian Peng, "DWCox: A density-weighted Cox model for outlier-robust prediction of prostate cancer survival", F1000 Research, 2016.

2015

1. Jingjing Wang, Wenzhu Tong, Hongkun Yu, Min Li, Xiuli Ma, Haoyan Cai, Tim Hanratty, and Jiawei Han, "Mining Multi-Aspect Reflection of News Events in Twitter: Discovery, Linking and Presentation", in Proc. of 2015 IEEE Int. Conf. on Data Mining (ICDM'15), Atlantic City, NJ, Nov. 2015

2. Chenguang Wang, Yangqiu Song, Haoan Li, Ming Zhang and Jiawei Han, "KnowSim: A Document Similarity Measure on Structured Heterogeneous Information Networks", in Proc. of 2015 IEEE Int. Conf. on Data Mining (ICDM'15), Atlantic City, NJ, Nov. 2015.

3. Ahmed El-Kishky, Yanglei Song, Chi Wang, Clare R. Voss, and Jiawei Han, "Scalable Topical Phrase Mining from Text Corpora", PVLDB 8(3): 305 - 316, 2015. Also, in Proc. of 2015 Int. Conf. on Very Large Data Bases (VLDB'15), Kohala Coast, Hawaii, Sept. 2015.

4. Qi Li, Yaliang Li, Jing Gao, Lu Su, Bo Zhao, Murat Demirbas, Wei Fan, and Jiawei Han, "A Confidence-Aware Approach for Truth Discovery on Long-Tail Data", PVLDB 8(4): 425-436, 2015 Also, in Proc. 2015 Int. Conf. on Very Large Data Bases (VLDB'15), Kohala Coast, Hawaii, Sept. 2015.

5. Jing Gao, Qi Li, Bo Zhao, Wei Fan, and Jiawei Han, "Truth Discovery and Crowdsourcing Aggregation: A Unified Perspective", PVLDB 8(12): 2048-2059 (2015). Also, in Proc. 2015 Int. Conf. on Very Large Data Bases (VLDB'15) (conference tutorial), Kohala Coast, Hawaii, Sept. 2015.

6. Shi Zhi, Jiawei Han, and Quanquan Gu, "Robust Classification of Information Networks by Consistent Graph Learning", in Proc. of 2015 European Conf. on Machine Learning and Principles and Practices of Knowledge Discovery in Databases (ECMLPKDD'15), Porto, Portugal, Sept. 2015.

7. Chao Zhang, Shan Jiang, Yucheng Chen, Yidan Sun, and Jiawei Han, "Fast Inbound Top-K Query for RandomWalk with Restart", in Proc. of 2015 European Conf. on Machine Learning and Principles and Practices of Knowledge Discovery in Databases (ECMLPKDD'15), Porto, Portugal, Sept. 2015. (Received the Best Student Paper Runner-Up award at ECML/PKDD 2015)

8. Chao Zhang, Yu Zheng, Xiuli Ma, Jiawei Han, "Assembler: Efficient Discovery of Spatial Coevolving Patterns in Massive Geosensory Data", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

9. Xiang Ren, Ahmed El-Kishky, Chi Wang, Fangbo Tao, Clare R. Voss, Heng Ji, Jiawei Han, "ClusType: Effective Entity Recognition and Typing by Relation Phrase-Based Clustering", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

10. Fenglong Ma, Yaliang Li, Qi Li, Minghui Qiu, Jing Gao, Shi Zhi, Lu Su, Bo Zhao, Heng Ji, and Jiawei Han, "FaitCrowd: Fine Grained Truth Discovery for Crowdsourced Data Aggregation", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

11. Chi Wang, Xueqing Liu, Yanglei Song, Jiawei Han, "Towards Interactive Construction of Topical Hierarchy: A Recursive Tensor Decomposition Approach", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

12. Yaliang Li, Qi Li, Jing Gao, Lu Su, Bo Zhao, Wei Fan, and Jiawei Han, "On the Discovery of Evolving Truth", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

13. Shi Zhi, Bo Zhao, Wenzhu Tong, Jing Gao, Dian Yu, Heng Ji, and Jiawei Han, "Modeling Truth Existence in Truth Discovery", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

14. Younghoon Kim, Jiawei Han, Gangzhou Yuan, "TOPT:AC: Topical Trajectory Pattern Mining", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

15. Chenguang Wang, Yangqiu Song, Ahmed El-Kishky, Dan Roth, Ming Zhang, Jiawei Han, "Incorporating World Knowledge to Document Clustering via Heterogeneous Information Networks", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

16. Honglei Zhuang, Aditya Parameswaran, Dan Roth, Jiawei Han, "Debiasing Crowdsourced Batches", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015

17. Xiang Ren, Ahmed El-Kishky, Chi Wang, and Jiawei Han, "Automatic Entity Recognition and Typing from Massive Text Corpora: A Phrase and Network Mining Approach" (conference tutorial), 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015
18. Aston Zhang, Amit Goyal, Weize Kong, Hongbo Deng, Anlei Dong, Yi Chang, Carl A. Gunter, Jiawei Han, "adaQAC: Adaptive Query Auto-Completion via Implicit Negative Feedback", in Proc. of 2015 ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR'15), Santiago, Chile, Aug. 2015.

19. Jiawei Han, Heng Ji, Yizhou Sun, "Successful Data Mining Methods for NLP", in Proc. of 2015 Annual Meet. of the Association for Computational Linguistics and Int. Joint Conf. on Natural Language Processing of the Asian Federation of Natural Language Processing (ACL'15) (Tutorial Abstract), Beijing, China, July 2015, pp. 1-4.

20. Boliang Zhang, Hongzhao Huang, Xiaoman Pan, Sujian Li, Chin-Yew Lin, Heng Ji, Kevin Knight, Zhen Wen, Yizhou Sun, Jiawei Han, Bulent Yener, Context-aware Entity Morph Decoding, in Proc. 2015 Annual Meet. of the Association for Computational Linguistics and Int. Joint Conf. on Natural Language Processing of the Asian Federation of Natural Language Processing (ACL'15), Beijing, China, July 2015, pp. 586-595.

21. Chenguang Wang, Yangqiu Song, Dan Roth, Chi Wang, Jiawei Han, Heng Ji, and Ming Zhang, "Constrained Information-Theoretic Tripartite Graph Clustering to Identify Semantically Similar Relations", in Proc. 2015 Int. Joint Conf. on Artificial Intelligence (IJCAI'15), Buenos Aires, Argentina, July 2015.

22. Jialu Liu, Jingbo Shang, Chi Wang, Xiang Ren, Jiawei Han, "Mining Quality Phrases from Massive Text Corpora", in Proc. of 2015 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'15), Melbourne, Australia, May 2015 (won Grand Prize in Yelp Dataset Challenge, 2015).

23. Fangbo Tao, Bo Zhao, Ariel Fuxman, Yang Li, Jiawei Han, "Leveraging Pattern Semantics for Constructing Entity Taxonomies in Enterprises", in Proc. of 2015 Int. Conf. on World-Wide Web (WWW'15), Florence, Italy, May 2015.

24. Huan Gui, Ya Xu, Anmol Bhasin, Jiawei Han, "Network A/B Testing: From Sampling to Estimation", in Proc. of 2015 Int. Conf. on World Wide Web (WWW'15), Florence, Italy, May 2015.

25. Jialu Liu, Chi Wang, Jing Gao, Quanquan Gu, Churu Aggarwal, Lance Kaplan, and Jiawei Han, "GIN: A Clustering Model for Capturing Dual Heterogeneity in Networked Data", in Proc. of 2015 SIAM Int. Conf. on Data Mining (SDM'15), Vancouver, Canada, Apr. 2015 (selected as one of the best papers in the conference and invited to Journal of Statistical Analysis and Data Mining (SADM) special issue "Best of SDM 2015").

26. Mengting Wan, Yunbo Ouyang, Lance Kaplan, Jiawei Han, "Graph Regularized Meta-path Based Transductive Regression in Heterogeneous Information Network", in Proc. of 2015 SIAM Int. Conf. on Data Mining (SDM'15), Vancouver, Canada, Apr. 2015.

27. Jingjing Wang, Hongbo Deng, and Jiawei Han, "Topic Periodicity Discovery from Text Data", in Proc. SPIE Vol. 9499, Next-Generation Analyst Ill, Baltimore, Maryland, April 2015.

28. Wei Feng, Chao Zhang, Wei Zhang, Jiawei Han, Jianyong Wang, Churu Aggarwal, Jianbin Huang, "STREAMCUBE: Hierarchical Spatio-temporal Hashtag Clustering for Event Exploration over the Twitter Stream", in Proc of 2015 IEEE Int. Conf. on Data Engineering (ICDE'15), Seoul, Korea, Apr. 2015.

29. Jonathan Kuck, Honglei Zhuang, Xifeng Yan, Hasan Cam, and Jiawei Han, "Query-Based Outlier Detection in Heterogeneous Information Networks", in Proc. of 2015 Int. Conf. on Extending Database Technology (EDBT'15), Brussels, Belgium, Mar. 2015 (selected as one of the best papers in the conference and invited to journal ACM Transactions on Database System (TODS) as Best of EDBT 2015).

30. Jialu Liu, Churu Aggarwal and Jiawei Han, "On Integrating Network and Community Discovery", in Proc. of 2015 Int. Conf. on Web Search and Data Mining (WSDM'15), Shanghai, China, Feb. 2015, pp. 117-126.

31. Doris Xin, De Liao and Jiawei Han, "Active Learning in Heterogeneous Information Networks", in Proc. of 2015 Int. School and Conf. on Network Science (NetSci'2015), Rio de Janeiro, Brazil, Jan. 2015.

32. Lu-An Tang, Xiao Yu, Quanquan Gu, Jiawei Han, Guofei Jiang, Alice Leung, and Thomas La Porta, "A Framework of Mining Trajectories from Untrustworthy Data in Cyber-Physical System", ACM Transactions on Knowledge Discovery from Data (TKDD), 9(3):16:1-16:35, 2015.

33. Zhenhui Li, Jingjing Wang, Hongbo Deng, and Jiawei Han, "tPeriodicity: Mining Event Periodicity from Incomplete Observations", IEEE Transactions on Knowledge and Data Engineering (TKDE), 27(5):1219-1232, 2015.

34. Jae-Gil Lee, Jiawei Han, and Xiaolei Li, "A Unifying Framework of Mining Trajectory Patterns of Various Temporal Tightness," IEEE Transactions on Knowledge and Data Engineering (TKDE), 27(6):1478-1490, 2015.

35. Ming Ji, Qi He, Jiawei Han, and Scott Spangler, "Mining Strong Relevance between Heterogeneous Entities from Unstructured Biomedical Data", Data Mining and Knowledge Discovery (DMKD), 29(4):976-998, 2015.

36. Wei Shen, Jianyong Wang, Jiawei Han, "Entity Linking with a Knowledge Base: Issues, Techniques, and Solutions", IEEE Transactions on Knowledge and Data Engineering (TKDE), 27(2):443-460, 2015.

37. Yong Yang, Lu Su, Mohammad Maafi Hasan Khan, Michael LeMay, TAREK F. Abdelzaher, Jiawei Han, "Power-Based Diagnosis of Node Silence in Remote High-End Sensing Systems", ACM Transactions on Sensor Networks (TOSN), 11(2):33:1-33:33, 2015.

38. Jun Li, Qiming Qin, Jiawei Han, Lu-An Tang, Kin Hou Lei, "Silence in Remote High-End Sensing Systems", ACM Transactions on Sensor Networks (TOSN), 11(2):33:1-33:33, 2015.

39. Chi Wang, Jialu Liu, Nihit Desai, Marina Danilevsky, and Jiawei Han, "Constructing Topical Hierarchies in Heterogeneous Information Networks", Knowledge and Information Systems (KAIS), 44(3):529-558, 2015.

40. Chi Wang and Jiawei Han, "Mining Latent Entity Structures", Synthesis Lectures on Data Mining and Knowledge Discovery, Morgan & Claypool Publishers, 2015.

2014

1. Manish Gupta, Jing Gao, Churu C. Aggarwal, and Jiawei Han, "Outlier Detection for Temporal Data: A Survey", IEEE Trans. on Knowledge and Data Engineering, 26(9):2250-2267, 2014.

2. Yizhou Sun, Jie Tang, Jiawei Han, Cheng Chen, and Manish Gupta, "Co-Evolution of Multi-Typed Objects in Dynamic Heterogeneous Information Networks", IEEE Transactions on Knowledge and Data Engineering (TKDE), 26(12):2942-2955, 2014.

3. Quanquan Gu, Huan Gui, and Jiawei Han, "Robust Tensor Decomposition with Gross Corruption", in Proc. of 2014 Conf. on Advances in Neural Information Processing Systems (NIPS'14), Montreal, Quebec, Canada, Dec. 2014.

4. Honglei Zhuang, Jing Zhang, George Brova, Jie Tang, Hasan Cam, Xifeng Yan and Jiawei Han, "Mining Query-Based Subnetwork Outliers in Heterogeneous Information Networks", in Proc. of 2014 IEEE Int. Conf. on Data Mining (ICDM'14), Shenzhen, China, Dec. 2014.
5. Quanquan Gu and Jiawei Han, "Online Spectral Learning on a Graph with Bandit Feedback", in Proc. of 2014 IEEE Int. Conf. on Data Mining (ICDM'14), Shenzhen, China, Dec. 2014.
6. Lu Su, Qi Li, Shaohan Hu, Shiguang Wang, Jing Gao, Hengchang Liu, TarekAbdelzaher, Jiawei Han, Xue Liu, Yan Gao and Lance Kaplan, "Generalized Decision Aggregation in Distributed Sensing Systems", in Proc. of IEEE Real-Time Systems Symposium (RTSS'14), Rome, Italy, Dec. 2014.
7. Huan Gui, Yizhou Sun, Jiawei Han, and George Brova, "Modeling Topic Diffusion in Multi-Relational Bibliographic Information Networks", in Proc. of 2014 ACM Int. Conf. on Information and Knowledge Management (CIKM'14), Shanghai, China, Nov. 2014.
8. Hongbo Deng, Yizhou Sun, Yi Chang, and Jiawei Han, "Probabilistic Models for Classification", in Charu C. Aggarawal (ed.), Data Classification: Algorithms and Applications, pp. 65-86, CRC Press, 2014.
10. Jiawei Han, "Construction, Exploration, and Mining of Semi-Structured, Heterogeneous Information Networks", Tutorial at the 2014 Military Sensing Symposium (MSS) National Symp. on Sensor Data Fusion (NSSDF), Springfield, VA, Oct. 2014.
11. Yingzhen Yang, Zengyang Wang, Jianchao Yang, Jiawei Han, and Thomas S.Huang, "Regularized "1-Graph for Data Clustering", in Proc. of 2014 British Machine Vision Conference (BMVC'14), Nottingham, UK, Sept. 2014.
13. Chao Zhang, Jiawei Han, Lidan Shou, Jiajun Lu, and Thomas La Porta, "Splitter: Mining Fine Grained Sequential Patterns in Semantic Trajectories", PVLDB} 7(9): 769-780, 2014 (Also,in Proc. 2014 Int. Conf. on Very Large Data Bases (VLDB'14), Hangzhou, China, Sept. 2014.)
14. Dian Yu, Hongzhao Huang, Taylor Cassidy, Heng Ji, Chi Wang, Shi Zhi, Jiawei Han and Clare Voss, "The Wisdom of Minority: Unsupervised Slot Filling Validation based on Multi-dimensional Truth-Finding with Multi-layer Linguistic Indicators", in Proc. of 2014 Int. Conf. on Computational Linguistic Applications (COLING'14), Dublin, Ireland, Aug. 2014.
15. Xiang Ren, Jialu Liu, Xiao Yu, Urvashi Khandelwal, Quanquan Gu, Lidan Wang, and Jiawei Han, "ClusCite: Effective Citation Recommendation by Information Network-Based Clustering," in Proc. 2014 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’14), New York, NY, Aug. 2014.
16. Bo Zong, Yinghui Wu, Jie Song, Ambuj Singh, Hasan Cam, Jiawei Han, Xifeng Yan, "Towards Scalable Critical Alert Mining", in Proc. 2014 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'14), New York, NY, Aug. 2014.
17. Jiawei Han, Chi Wang, Ahmed El-Kishky, "Bringing Structure to Text: Mining Phrases, Entity Concepts, Topics, and Hierarchies", in Proc. of 2014 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’14), New York, NY, Aug. 2014.
18. Quanquan Gu, Tong Zhang, Jiawei Han, "Batch-Mode Active Learning via Error Bound Minimization", in Proc. of 2014 Conf. on Uncertainty in Artificial Intelligence (UAI), Quebec City, Quebec, Canada, July 2014.
19. Chi Wang, Xueqin Liu, Yanglei Song, Jiawei Han, "Scalable Moment-Based Learning for Topic Model", in Proc. 2014 ICML Workshop on Method of Moments and Spectral Learning (ICML-MMSL’14), Beijing, China, June 2014.
20. Hongbo Deng, Jiawei Han, Hao Li, Heng Ji, Hongning Wang, and Yue Lu, "Exploring and Inferring User-User Pseudo-Friendship for Sentiment Analysis with Heterogeneous Networks", accepted by Statistical Analysis and Data Mining, Feb. 2014.
21. Chi Liu, Q. Xueqin Liu, Yang Lei, Jiawei Han and Jian Ma, "A network-assisted co-clustering algorithm to discover cancer subtypes based on gene expression", BMC Bioinformatics, 15:37, 2014.
22. Boliang Zhang, Hongzhao Huang, Xiaoman Pan, Heng Ji, Kevin Knight, ZhenWen, Yizhou Sun, Jiawei Han and Bulent Yener, "Be Appropriate and Funny: Automatic Entity Morph Encoding", in Proc. of 2014 Annual Meeting of the Association for Computational Linguistics (ACL’14), Baltimore, USA, June 2014.
23. Wei Shen, Jiawei Han, and Jianyong Yang, "A Probabilistic Model for Linking Named Entities in Web Text with Heterogeneous Information Networks", in Proc. of 2014 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’14), Snowbird, UT, June 2014.
24. Qi Li, Yaliang Lu, Jing Gao, Bo Zhao, Wei Fan, and Jiawei Han, "Resolving Conflicts in Heterogeneous Data by Truth Discovery and Source Reliability Estimation", in Proc. of 2014 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’14), Snowbird, UT, June 2014.
25. Fangbo Tao, Jiawei Han, Heng Ji, George Brova, Chi Wang, Brandon Norick, Ahmed El-Kishky, Jialu Liu, Xiang Ren, Yizhou Sun, "NewsNetExplorer: Automatic Construction and Exploration of News Information Networks", (system demo), in Proc. of 2014 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’14), Snowbird, UT, June 2014.
26. Jiawei Han and Chi Wang, "MiningLatent Entity Structures from Massive Unstructured and Interconnected Data", (Conference Tutorial), in Proc. of 2014 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’14), Snowbird, UT, June 2014.
27. Jiawei Han, "Construction and Mining of Heterogeneous Information Networks: Will It Be a Key to Web-Aged Information Management and Mining?" (keynote speech slides), in Proc. of 2014 Int. Conf. on Web-Age Information Management (WAIM’14), Macau, China, June 2014.
28. Manish Gupta, Jing Gao, Charu Aggarwal, and Jiawei Han, Outlier Detection for Temporal Data, Morgan & Claypool Publishers, 2014.
29. Marina Danilevsky, Chi Wang, Nihat Desai, Xiang Ren, Jingyi Guo, and Jiawei Han, "Automatic Construction and Ranking of Topical Keyphrases on Collections of Short Documents", in Proc. of 2014 SIAM Int. Conf. on Data Mining (SDM’14), Philadelphia, PA, April 2014.
30. Manish Gupta, Arun Mallya, Subhro Roy, Jason H. D. Cho, and Jiawei Han,"Local Learning for Mining Outlier Subgraphs from Network Datasets", in Proc. of 2014 SIAM Int. Conf. on Data Mining (SDM’14), Philadelphia, PA, April 2014.
31. Jingjing Wang, Changsung Kang, Yi Chang and Jiawei Han, "A Hierarchical Dirichlet Model for Taxonomy Expansion for Search Engines", in Proc. of 2014 Int. World-Wide Web Conf. (WWW’14), Seoul, Korea, April 2014.
32. Lidan Wang, Jimmy Lin, Donald Metzler and Jiawei Han, "Learning to Efficiently Rank on Big Data", Tutorial at 2014 Int. World-Wide Web Conf. (WWW’14), Seoul, Korea, April 2014.
33. Aston Zhang, Xing Xie, Kevin Chang, Carl Gunter, Jiawei Han and Xiaofeng Wang, "Privacy Risk in Anonymized Heterogeneous Information Networks", in Proc. of 2014 Int. Conf. on Extending Database Technology (EDBT’14), Athens, Greece, March 2014.
34. Manish Gupta, Jing Gao, Xifeng Yan, Hasan Cam, and Jiawei Han, "Top-K Interesting Subgraph Discovery in Information Networks", in Proc. of 2014 IEEE Int. Conf. on Data Engineering (ICDE’14), Chicago, IL, Mar. 2014.
35. Xiao Yu, Xiang Ren, Yizhou Sun, Quanquan Gu, Bradley Sturt, Urvashi Khandelwal, Brandon Norick, and Jiawei Han, Personalized Entity Recommendation: A Heterogeneous Information Network Approach", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM’14), New York City, NY, Feb. 2014.
36. Xiao Yu, Hao Ma, Bo-June (Paul) Hsu and Jiawei Han, "On Building Entity Recommender Systems Using User Click Log and Freecase Knowledge", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM’14), New York City, NY, Feb. 2014.
37. Xiang Ren, Yujing Wang, Xiaoyu Sun, Jun Yan, Zheng Chen, and Jiawei Han, "Heterogeneous Graph-Based Intent Learning with Queries, Web Pages and Wikipedia Concepts", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM'14), New York City, NY, Feb. 2014.

38. Chi Wang and Jiawei Han, "Role Discovery", to appear in the Encyclopedia of Social Networks and Mining (ESNAM), Springer Verlag, 2014.

39. Zhenhui Li and Jiawei Han, "Mining Periodicity from Dynamic and Incomplete Spatiotemporal Data", in Wesley W. Chu (ed.), Data Mining and Knowledge Discovery for Big Data, pp. 41-82, Springer, 2014.

40. Hongbo Deng and Jiawei Han, "Probabilistic Models for Clustering", in Charu C. Aggarwal and Chandan K. Reddy (eds.), Data Clustering: Algorithms and Applications, pp. 61-86, CRC Press, 2014.

41. Jialiu Liu and Jiawei Han, "Spectral Clustering", in Charu C. Aggarwal and Chandan K. Reddy (eds.), Data Clustering: Algorithms and Applications, pp. 177-200, CRC Press, 2014.

2013

1. Hyungsoo Kim, Xiang Ren, Yizhou Sun, Chi Wang, and Jiawei Han, "Semantic Frame-Based Document Representation for Comparable Corpora", in Proc. 2013 IEEE Int. Conf. on Data Mining (ICDM'13), Dallas, TX, Dec. 2013.

2. Chi Wang, Marina Danilevsky, Jialiu Liu, Nihit Desai, Heng Ji, and Jiawei Han, "Constructing Topical Hierarchies in Heterogeneous Information Networks", in Proc. 2013 IEEE Int. Conf. on Data Mining (ICDM'13), Dallas, TX, Dec. 2013. (selected as one of the bestpapers for journal special issue publication in the journal "Knowledge and Information Systems")

3. Scott Deeann Chen, Ying-Yu Chen, Jiawei Han, and Pierre Moulin,"A Feature-Enhanced Ranking-Based Classifier for Multimodal Data and Heterogeneous Information Networks", in Proc. 2013 IEEE Int. Conf. on Data Mining (ICDM'13), Dallas, TX, Dec. 2013.

4. Chi Wang, Xiao Yu, Yenan Li, Chengxiang Zhai, and Jiawei Han, "Content Coverage Maximization on Word Networks for Hierarchical Topic Summarization", in Proc. of Int. Conf. on Information and Knowledge Management (CIKM'13), San Francisco, CA, Oct. 2013, pp. 249-258. (nominated as one of the best paper award candidates)

5. Paul Bennett, C. Lee Giles, Alon Y. Halevy, Jiawei Han, Marti A. Hearst, Jure Leskovec: Channeling the deluge: research challenges for big and fast information systems. in Proc. of 2013 Int. Conf. on Information and Knowledge Management (CIKM'13), San Francisco, CA, Oct. 2013, pp. 2537-2538

6. Raghu K. Ganti, Mudhakar Srivatsa, Anand Ranganathan, Jiawei Han: Inferring human mobility patterns from taxicab location traces. in Proc. 2013 ACM Int. Joint Conf. on Pervasive and Ubiquitous Computing (UbiComp'13), Zurich, Switzerland, Sept. 2013.pp. 459-468


8. Xiao Yu, Xiang Ren, Yizhou Sun, Bradley Sturt, Urvashi Khandelwal, Quanquan Gu, Brandon Norick, and Jiawei Han, "HeteRec: Entity Recommendation in Heterogeneous Information Networks with Implicit User Feedback", in Proc. of 2013 ACM Int. Conf. Series on Recommendation Systems (RecSys'13), Hong Kong, Oct. 2013, pp. 347-350.

9. Manish Gupta, Jing Gao, and Jiawei Han, "Community Distribution Outlier Detection in Heterogeneous Information Networks", in Proc. of 2013 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'13), Prague, Czech, Sept. 2013, pp. 557-573.

10. Manish Gupta, Jing Gao, Charu Aggarwal and Jiawei Han,"Outlier Detection for Graph Data", Tutorial at 2013 IEEE/ACM Int. Conf. on SocialNetworks Analysis and Mining (ASONAM'13), Niagara Falls, Canada, Aug. 2013.

11. Manish Gupta, Jing Gao, Xifeng Yan, Hasan Cam, and Jiawei Han, "On Detecting Association-Based Clique Outliers in Heterogeneous Information Networks", in Proc. 2013 ACM Int. Conf. on Social Networks Analysis and Mining (ASONAM'13), Niagara Falls, Canada, Aug. 2013.

12. Tim Weninger, Xihao Avi Zhu, and Jiawei Han, "An Exploration of Discussion Threads in Social News Sites: A Case Study of the Reddit Community", in Proc. of 2013 IEEE/ACM Int. Conf. on Social Networks Analysis and Mining (ASONAM'13), Niagara Falls, Canada, Aug. 2013.

13. Jialiu Liu, Kim Hou Lei, Jeffery Yufei Liu, Chi Wang, and Jiawei Han, "Ranking-Based Name Matching for Author Disambiguation in Bibliographic Data", in Proc. of KDD Cup 2013 Workshop (KDDCUP'13), Chicago, IL, Aug. 2013.

14. Tanav Chau, Prafulla Grishar, Lu-An Tang, Jia Li, and Jiawei Han, "Spatiotemporal Periodical Pattern Mining in Traffic Data", in Proc. of 2013 ACM SIGKDD Int. Workshop on Urban Computing (UbiComp'13), Chicago, IL, Aug. 2013.

15. Marina Danilevsky, Chi Wang, Nihit Desai, Jiawei Han, "Entity Role Discovery in Hierarchical Topical Communities", in Proc. of 2013 ACM SIGKDD Int. Workshop on Mining Data Semantics in Heterogeneous Information Networks (MDS'13), Chicago, IL, Aug. 2013.

16. Quanquan Gu, Charu Aggarwal, Jialiu Liu, and Jiawei Han, "Selective Sampling on Graphs for Classification", in Proc. of 2013 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'13), Chicago, IL, Aug. 2013, pp. 410-418. (selected as one of the best papers for publication in the special issue of "Selected Papers in KDD 2013" in the journal "ACM Trans. on Knowledge Discovery from Data")

17. Chi Wang, Marina Danilevsky, Nihit Desai, Yinan Zhang, Phuong Nguyen, Thrivikrama Taula, and Jiawei Han, "A Phrase Mining Framework for Recursive Construction of a Topical Hierarchy", in Proc. of 2013 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'13), Chicago, IL, Aug. 2013, pp. 437-445.

18. Yang Li, Chi Wang, Fangguo Han, Jiawei Han, Dan Roth, Xifeng Yan, "Mining Evidences for Named Entity Disambiguation", in Proc. of 2013 ACM SIGKDD Int. Conf. on Knowledge Discovery andData Mining (KDD'13), Chicago, IL, Aug. 2013, pp. 1070-1078.

19. Marina Danilevsky, Chi Wang, Fangbo Tao, Son Nguyen, Gong Chen, Nihit Desai, and Jiawei Han. "AMETHYST: A System for Mining and Exploring Topical Hierarchies in Information Networks", in Proc. of 2013 ACM SIGKDD Int. Conf. onKnowledge Discovery and Data Mining (KDD'13), Chicago, IL, Aug. 2013, pp. 1458-1461.

20. Fangbo Tao, Kin Hou Lei, Jiawei Han, ChengXiang Zhai, Xiao Cheng, Marina Danilevsky, Nihit Desai, Bolin Ding, Jing Ge, Heng Ji, Ruchao Kanade, AnneKao, Qi Li, Yenan Li, Cindy Xide Lin, Jialiu Liu, Nikunj Oza, Ashok Srivastava, Rod Tjoelker, Chi Wang, Duo Zhang, and Bo Zhao, "EventCube: Multi-Dimensional Search and Mining of Structured and Text Data", (system demo) in Proc. of 2013 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'13), Chicago, IL, Aug. 2013, pp. 1494-1497.

21. Jialiu Liu, Chi Wang, Marina Danilevsky, and Jiawei Han, "Large-Scale Spectral Clustering on Graphs", inProc. of 2013 Int. Joint Conf. on Artificial Intelligence (IJCAI'13), Beijing, China, Aug. 2013.
23. Jialu Liu and Jiawei Han, "HINMF: A Matrix Factorization Method for Clustering in Heterogeneous Information Networks", in Proc. of IJCAI-13 HINA workshop (IJCAI-HINA’13), Beijing, China, Aug. 2013.

24. Xiao Yu, Xiang Ren, Quanquan Gu, Yizhou Sun, and Jiawei Han, "Collaborative Filtering with Entity Similarity Regularization in Heterogeneous Information Networks", in Proc. of IJCAI-13 HINA workshop (IJCAI-HINA’13), Beijing, China, Aug. 2013.

25. Hongzhao Huang, Zhen Wen, Dian Yu, Heng Ji, Yizhou Sun, Jiawei Han and He Li, "Resolving Entity Morphs in Censored Data", in Proc. of 2013 Annual Meeting of the Association for Computational Linguistics (ACL’13), Sofia, Bulgaria, Aug. 2013, 1083-1093.

26. Fangbo Tao, Xiao Yu, Kin Hou Lei, George Brova, Xiao Cheng Jiawei Han, Rucha Kanade, Yizhou Sun, Chi Wang, Lidan Wang, Tim Weninger, "Research-Inspite: Providing Insight on Research by Publication Network Analysis", (system demo), in Proc. of 2013 ACM SIGKDD Int. Conf. on Management of Data (SIGKDD’13), New York, NY, June 2013, pp. 1093-1096.

27. Jun Li, Qiming Qin, Jiawei Han, Lu-An Tang, and Kin Hou Lei, "Mining Trajectory Data and Geotagged Data in Social Media for Road Map Inference", in Proc of 2013 UCGIS (University Consortium for Geographic Information Science) Symposium, Washington, USA, May, 2013.

28. Guo-Jun Qi, Charu C. Aggarwal, Jiawei Han, and Thomas Huang, "Mining Collective Intelligence in Groups", in Proc. of 2013 Int. Conf. on Word Wide Web (WWW’13), Rio de Janeiro, Brazil, May 2013, pp.1041-1052.

29. Tim Weninger and Jiawei Han, "Information Network Analysis and Extraction on the World Wide Web", in Proc. of 2013 Int. Conf. on the Web (WWW’13), Rio de Janeiro, Brazil, May 2013. (Conf. Tutorial).

30. Tim Weninger, Thomas J. Johnston, and Jiawei Han, "The Parallel Path Framework for Entity Discovery on the Web", ACM Transactions on the Web (TWEB’13) (in Press)

31. Alice Leung, William Dron, Jiawei Han, Chi Wang, John P. Hancock, Matthew Aguirre, Jaideep Srivastava, Amogh Mahapatra, Atanu Roy, Jon Purnell, Lisa Scott, "Social Patterns: Community Detection Using Behavior-Generated Network Dataset", IEEE 2013 USMA Network Science Workshop, West Point, New York, April 2013.

32. Hongbo Deng, Jiawei Han, Hao Li, Heng Ji, Hongning Wang, and Yue Lu, "Exploring and Inferring User-User-Pseudo-Friendship for Sentiment Analysis with Heterogeneous Networks", in Proc. of 2013 SIAM Data Mining Conf. (SDM’13), Austin, TX, May 2013, pp. 378-389. This paper was also awarded as one of the best papers for publication in the special issue of “Best of SDM 2013” in the journal “Statistical Analysis and Data Mining”.

33. Jialu Liu, Chi Wang, Jing Gao, and Jiawei Han, "Multi-View Clustering via Joint Nonnegative Matrix Factorization", in Proc. of 2013 SIAM Data Mining Conf. (SDM’13), Austin, TX, May 2013, pp. 252-260.

34. Chi Wang, Hongning Wang, Jialu Liu, Ming Ji, Lu Su, Yuguo Chen, Jiawei Han, "On the Detectability of Node Grouping in Networks", in Proc. of 2013 SIAM Data Mining Conf. (SDM’13), Austin, TX, May 2013, pp. 713-721.

35. Manish Gupta, Jing Gao, Charu Aggarwal, and Jiawei Han, "Outlier Detection for Temporal Data", tutorial at 2013 SIAM Data Mining Conf. (SDM’13), Austin, TX, May 2013.


37. Quanquan Gu and Jiawei Han, "Clustered Support Vector Machine", in Proc. of 2013 Int. Conf. on Artificial Intelligence and Statistics (AISTAT’13), Scottsdale, AZ, Apr. 2013, pp.307-315.

38. Quanquan Gu, Charu Aggarwal and Jiawei Han, "Unsupervised Link Selection in Networks", in Proc. of 2013 Int. Conf. on Artificial Intelligence and Statistics (AISTAT’13), Scottsdale, AZ, Apr. 2013, pp. 298-306.


40. Nan Li, Ziyu Guan, Lijie Ren, Jian Wu, Jiawei Han, and Xifeng Yan, "gicberg: Towards Iceberg Analysis in Large Graphs", in Proc. of 2013 Int. Conf. on Data Engineering (ICDE’13), Sydney, Australia, Apr. 2013, pp. 1021-1032.

41. Tim Weninger and Jiawei Han, "Exploring Structure and Content on the Web: Extraction and Integration of the Semi-Structured Web", (Conference Tutorial) in Proc. of 2013 ACM Intl. Conf. on Web Search and Data Mining (WSDM’13), Rome, Italy, Feb. 2013, pp. 779-780.

42. Shi Li, Jialu Liu, and Jiawei Han, "MedRank: Discovering Influential Medical Treatments from Literature by Information Network Analysis", in Proc. of 2013 Australasian Database Conf. (ADC’13), Adelaide, South Australia, Jan. 2013.

43. Xin Jin, Jiebo Luo, Jie Yu, Gang Wang, Diraj Joshi, and Jiawei Han, "Reinforced Similarity Integration in Image-Rich Information Networks", IEEE Transactions on Knowledge and Data Engineering (TKDE), 25(2):448-460, 2013.

44. Jing Gao, Feng Liang, Wei Fan, Yizhou Sun, and Jiawei Han, "A Graph-based Consensus Maximization Approach for Combining Multiple Supervised and Unsupervised Models", IEEE Transactions on Knowledge and Data Engineering (TKDE), 25(1):15-28, 2013.

45. Lu An Tang, Xiao Yu, Sangkyum Kim, Quanquan Gu, Jiawei Han, Alice Leung, Thomas F. La Porta: Trustworthiness analysis of sensor data in cyber-physical systems. J. Comput. Syst. Sci. 79(3): 393-401 (2013)

46. Duo Zhang, ChengXiang Zhai, Jiawei Han; MiTexCube: MicroTextCluster Cube for online analysis of text cells and its applications. Statistical Analysis and Data Mining 6(3): 243-259 (2013).

47. Yizhou Sun, Brandon Norick, Jiawei Han, Xifeng Yan, Phillip S. Yu, Xiao Yu: "PathSelClus: Integrating Meta-Path Selection with User-Guided Object Clustering in Heterogeneous Information Networks", ACM Transactions on Knowledge Discovery from Data (TKDD), 7(3): 11 (2013)

48. Ming Ji, Binbin Lin, Xiaofei He, Deng Cai, Jiawei Han, "Parallel Field Ranking", ACM Transactions on Knowledge Discovery from Data (TKDD), 7(3): 15 (2013)

49. Mohammad M. Masud, Qing Chen, Latifur Khan, Charu C. Aggarwal, Jing Gao, Jiawei Han, Ashok N. Srivastava, Nikunj C. Oza: Classification and Adaptive Novel Class Detection of Feature-Evolving Data Streams. IEEE Trans. Knowl. Data Eng. 25(7): 1484-1497 (2013)

50. Jianbin Huang, Heli Sun, Qinbao Song, Hongbo Deng, Jiawei Han: Revealing Density-Based Clustering Structure from the Core-Connected Tree of a Network. IEEE Trans. Knowl. Data Eng. 25(8): 1876-1889 (2013)

51. Wei Gao, Guohong Cao, Tom La Porta, Jiawei Han: On Exploiting Transient Social Contact Patterns for Data Forwarding in Delay-Tolerant Networks. IEEE Trans. Mob. Comput. 12(1): 151-165 (2013)

52. Tim Weninger, Thomas J. Johnston, Jiawei Han: "The Parallel Path Framework for Entity Discovery on the Web", ACM Trans. on the Web (TWEB) 7(3): 16 (2013)

53. Hongbo Deng, Jiawei Han: Probabilistic Models for Clustering. Data Clustering: Algorithms and Applications 2013: 61-86

54. Jialu Liu, Jiawei Han: Spectral Clustering. Data Clustering: Algorithms and Applications 2013: 177-200

55. Hong Cheng, Jiawei Han, Xifeng Yan, Phillip S. Yu: Efficient Direct Mining of Selective Discriminative Patterns for Classification. Contrast Data Mining 2013: 39-58

56. Charu C. Aggarwal, Jiawei Han: A Survey of RFID Data Processing. Managing and Mining Sensor Data 2013: 349-382
2012

1. Yizhou Sun and Jiawei Han, "Mining Heterogeneous Information Networks: A Structural Analysis Approach", SIGKDD Explorations, 14 (2):20-28, 2012.

2. Hyunsul Kim, Yizhou Sun, Julia Hockenmaier, and Jiawei Han, "ETM: Entity Topic Models for Mining Documents Associated with Entities", in Proc. of 2012 IEEE Int. Conf. on Data Mining (ICDM'12), Brussels, Belgium, Dec. 2012 (selected as one of the best papers for possible publication in the journal "Knowledge and Information Systems")

3. Yang Yang, Nitesh Chawla, Yizhou Sun, and Jiawei Han, "Predicting Links in Multi-Relational and Heterogeneous Networks", in Proc. of 2012 IEEE Int. Conf. on Data Mining (ICDM'12), Brussels, Belgium, Dec. 2012.

4. Mohammad Masud, Tahseen Al-Khateeb, Lailur Khan, Charu Aggarwal, and Jiawei Han, "Recurring and Novel Class Detection using Class-Based Ensemble", in Proc. of 2012 IEEE Int. Conf. on Data Mining (ICDM'12), Brussels, Belgium, Dec. 2012.

5. Quanquan Gu and Jiawei Han, "Towards Active Learning on Graphs: An Error Bound Minimization Approach", in Proc. of 2012 IEEE Int. Conf. on Data Mining (ICDM'12), Brussels, Belgium, Dec. 2012.

6. Hongzhao Huang, Arkaitz Zubiaga, Heng Ji, Hongbo Deng, Dong Wang, Hieu Le, Tarek Abdelzaher, Jiawei Han, Alice Leung, John Hancock, and Clare Voss, "Tweet Ranking Based on Heterogeneous Networks", Proc of 2012 Int. Conf. on Computational Linguistics (COLING'12), Mumbai, India, Dec. 2012. pp. 1239-1256

7. Quanquan Gu, Tong Zhang, Chris Ding, and Jiawei Han, "Selective Labeling via Error Bound Minimization", in Proc. of 2012 Neural Information Processing Systems Conf. (NIPS'12), Lake Tahoe, NV, Dec. 2012.

8. Lu Su, Shaohua Hu, Shen Li, Feng Liang, Jing Gao, Tarek Abdelzaher, and Jiawei Han, "Quality of Information Based Data Selection and Transmission in Wireless Sensor Networks", in Proc. of 2012 IEEE Real-Time Systems Symp. (RTSS'12), San Juan, Puerto Rico, Dec. 2012.

9. Xiong Liu, Kaizhi Tang, Jeffrey Hancock, Jiawei Han, Mitchell Song, Roger Xu, Vikram Manikonda, "SocialCube: A Text Cube Framework for Analyzing Social Media Data", in Proc. of 2102 ASE Int. Conf. on Social Informatics (SocialInformatics2012), Washington, D.C., Dec. 2012.

10. Duo Zhang, Chengxiang Zhai and Jiawei Han, "MiTexCube: MicroTextCube Cluster for Online Analysis of Text Cells and Its Applications", Statistical Analysis and Data Mining, 2012. DOI: 10.1002/sam.11159

11. Lu-An Tang, Yu Zheng, Jing Yuan, Jiawei Han, Alice Leung, Wen-Chih Peng, Thomas La Porta, and Lance Kaplan, "A Framework of Traveling Companion Discovery on Trajectory Data Streams", ACM Transactions on Intelligent Systems and Technology (ACM TIST), 2012.

12. Tim Weninger, Yonatan Bisk, and Jiawei Han, "Document-Topix Hierarchies from Document Graphs", in Proc. of 2012 Int. Conf. on Information and Knowledge Management (CIKM'12), Maui, Hawaii, Oct. 2012.

13. Xia Peng, Ondrej Norick, Tianchong Mao, and Jiawei Han, "User Guided Entity Similarity Search Using Meta-Path Selection in Heterogeneous Information Networks", in Proc. of 2012 Int. Conf. on Information and Knowledge Management (CIKM'12), Maui, Hawaii, Oct. 2012.

14. Cindy Xide Lin, Ming Ji, Marina Danilevsky, and Jiawei Han, "Efficient Mining of Correlated Sequential Patterns Based on Null Hypothesis ", in Proc. of 2012 Int. Workshop on Web-Scale Knowledge Representation, Retrieval, and Reasoning (Web-KR 2012), co-located with 2012 Int. Conf. on Information and Knowledge Management (CIKM'12), Maui, Hawaii, Oct. 2012.

15. Manish Gupta, Jing Gao, ChengXiang Zhai, Jiawei Han, "Predicting Future Popularity Trend of Events in Microblogging Platforms", in Proc. of 2nd Annual Meeting of American Society for Information Science & Technology (ASIST'12), Baltimore, MD, Oct. 2012 (slides).

16. Manish Gupta, Jing Gao, Yizhou Sun, and Jiawei Han, "Community Trend Outlier Detection Using Soft Temporal Pattern Mining", in Proc. of 2012 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'12), Bristol, UK, Sept. 2012.

17. Taylor Cassidy, Heng Ji, Hongbo Deng, Jing Zheng, Jiawei Han, "Analysis and Refinement of Cross-lingual Entity Linking", in Proc. of 2012 Conf. and Labs of the Evaluation Forum on Information Access Evaluation meets Multilinguality, Multimodality, and Visual Analytics (CLEF'12), Rome, Italy, Sept. 2012

18. Tarek Abdelzaher, Jiawei Han, Xifeng Yan, and Philip S. Yu, "On the Power of Heterogeneous Information Networks" (conference tutorial), in Proc. of 2012 Int. Conf. on Advances in Social Network Analysis and Mining (ASONAM'12), Istanbul, Turkey, Aug. 2012.

19. Bo Zhao and Jiawei Han, "A Probabilistic Model for Estimating Real-Valued Truth from Conflicting Sources", in Proc. of 2012 IEEE Int. Conf. on Very Large Data Bases (VLDB'12), Istanbul, Turkey, Aug. 2012.

20. Yizhou Sun, Jiawei Han, Xifeng Yan, and Philip S. Yu, "Mining Knowledge from Interconnected Data: A Heterogeneous Information Network Analysis Approach" PVLDB 5(12): 2022-2023.2012. (Conference tutorial at 2012 Int. Conf. on Very Large Data Bases (VLDB'12 /PVLDB), Istanbul, Turkey, Aug. 2012.

21. Bo Zhao, Benjamin I. P. Rubinstein, Jim Gemmell, and Jiawei Han, "A Bayesian Approach to Discovering Truth from Conflicting Sources for Data Integration", in Proc. of 2012 Int. Conf. on Very Large Data Bases (VLDB'12/PVLDB), Istanbul, Turkey, Aug. 2012.

22. Yizhou Sun, Charu C. Aggarwal, and Jiawei Han, "Relation Strength-Aware Clustering of Heterogeneous Information Networks with Incomplete Attributes", in Proc. of 2012 Int. Conf. on Very Large Data Bases (VLDB'12/PVLDB), Istanbul, Turkey, Aug. 2012.

23. Marina Barsky, Sangkyong Kim, Tim Weninger, and Jiawei Han, "Mining Flipping Correlations from Transactional Databases", in Proc. of 2012 Int. Conf. on Very Large Data Bases (VLDB'12/PVLDB), Istanbul, Turkey, Aug. 2012.

24. Jiawei Han, "Construction of Web-Based, Service-Oriented Information Networks: A Data Mining Perspective” (keynote speech), in Proc. of 2012 Int. Conf. on Web-Age Information Management (WAIM'12), Harbin, China, Aug. 2012.

25. Manish Gupta, Jing Gao, Yizhou Sun, and Jiawei Han, "Integrating Community Matching and Outlier Detection for Mining Evolutionary Community Outliers", in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'12), Beijing, China, Aug. 2012.
2011

1. Bolin Ding, Bo Zhao, Cindy Xide Lin, Jiawei Han, Chengxiang Zhai, Ashok Srivastava, Nikunj C. Oza, "Efficient Keyword-Based Search for Top-K Cells in Text CUBE", IEEE Transactions on Knowledge and Data Engineering (TKDE) (Special Issue: KeywordSearch on Structured Data), 23(12):1795-1810, 2011.

2. Xin Jin, Scott Spangler, Ying Chen, Keke Cai, Rui Ma, Li Zhang, Xian Wuand Jiawei Han, "Patent Maintenance Recommendation with Patent Information Network Model", in Proc. 2011 IEEE Conf. on Data Mining (ICDM’11), Vancouver, Canada, Dec. 2011.

3. Hyungsu Kim, David Sheridan, Sungjin Im, Shobha Vasudevan, Tarek Abdelzaher, and Jiawei Han, "Signature Pattern Covering via Local Greedy Algorithm and Pattern Shrink", in Proc. 2011 IEEE Conf. on Data Mining (ICDM’11), Vancouver, Canada, Dec. 2011.

4. Cindy Xide Lin, Jiawei Han, Chengxiang Zhai, Ashok Srivastava, Nikunj C. Oza, "Learning Influence from Heterogeneous Social Networks", Data Mining and Knowledge Discovery, Volume 25, Number 3 (2012), 511-544, DOI: 10.1007/s10618-012-0252-3

5. Zhenhui Li, Jiawei Han, Bolin Ding, and Roland Kays, "Mining Periodic Behaviors of Object Movements for Animal and Biological Sustainability Studies", Data Mining and Knowledge Discovery, Volume 24, Number 2 (2012), 355-386, DOI: 10.1007/s10618-011-0227-9
25. Cindy Xide Lin, Qiaozhu Mei, Yunliang Jiang, Jiawei Han, and Shanxiang Qi, "Inferring the Diffusion and Evolution of Topics in Social Communities", in Proc. of 2011 ACM SIGKDD Workshop on Social Network Mining and Analysis (SNAKDD’11), San Diego, CA, Aug. 2011.

26. Manish Gupta, Charu C. Aggarwal, and Jiawei Han, "Finding Top-k Shortest Path Distance Changes in an Evolutionary Network", in Proc. of 2011 Int. Symp. on Spatial and Temporal Databases (SSTD’11), Minneapolis, MN, Aug. 2011.

27. Zhenhui Li, Cindy Xide Lin, Bolin Ding, and Jiawei Han, "Mining Significant Time Intervals for Relationship Detection", in Proc. of 2011 Int. Symp. on Spatial and Temporal Databases (SSTD’11), Minneapolis, MN, Aug. 2011.

28. Lu-An Tang, Yu Zheng, Xing Xie, Ling Yuan, Xiao Yu, Jiawei Han, "Retrieving k-Nearest Neighboring Trajectories by a Set of Point Locations", in Proc. of 2011 Int. Symp. on Spatial and Temporal Databases (SSTD’11), Minneapolis, MN, Aug. 2011.

29. Ruoming Jin, Lin Liu, Bolin Ding, and Xiaohang Wang, "Distance Constraint Reachability Computation in Uncertain Graphs", accepted by PVLDB, 2011.

30. Yizhou Sun, Jiawei Han, Xifeng Yan, Philip S. Yu, and Tianyi Wu, "PathSim: Meta Path-Based Top-K Similarity Search in Heterogeneous Information Networks", in Proc. of 2011 Int. Conf. on Very Large Data Bases (VLDB’11), Seattle, WA, Aug. 2011.

31. Feida Zhu, Qiang Qu, David Lo, Xifeng Yan, Jiawei Han, and Philip S. Yu, "Mining Top-K Large Structural Patterns in a Massive Network", in Proc. of 2011 Int. Conf. on Very Large Data Bases (VLDB’11), Seattle, WA, Aug. 2011.

32. Lixiang Chen, Xinyao Cheng, Xiayu Sun, Reun, and Jiawei Han, "On Link-Based Similarity Join", in Proc. of 2011 Int. Conf. on Very Large Data Bases (VLDB’11), Seattle, WA, Aug. 2011.

33. Xin Jin, Cindy Xide Lin, Jiebo Luo, and Jiawei Han, "SocialSpamGuard: A Data Mining-Based Spam Detection System for Social Media Networks", in Proc. of 2011 Int. Conf. on Very Large Data Bases (VLDB’11), Seattle, WA, Aug. 2011.

34. Quanquan Gu, Zhenhui Li, and Jiawei Han, "Learning a Kernel for Multi-Task Clustering", in Proc. of 2011 AAAI Conf. on Artificial Intelligence (AAAI’11), San Francisco, CA, Aug. 2011.

35. Manish Gupta, Rui Li, Zhijun Yin, and Jiawei Han, "An Overview of Social Tagging Techniques", in Charu C. Aggarwal (ed.), Social Network Data Analysis, pp. 447-498, Springer, 2011.

36. Dong Wang, Tarek Abdelzaher, Hossein Ahmadi, Jeff Pasternack, Dan Roth, Manish Gupta, Jiawei Han, Omid Fatemieh, Hieu Le, Charu Aggarwal, "On Bayesian Interpretation of Fact-finding in Information Networks", in Proc. of 2011 Int. Conf. on Information Fusion 2011 (Fusion’11), Chicago, IL, April 2011.

37. H. Khac Le, J. Pasternack, H. Ahmadi, M. Gupta, Y. Sun, T. Abdelzaher, J. Han, D. Roth, B. Szymanski, S. Adali, "Apollo: Towards Factfinding in Participatory Sensing", in Proc. of 2011 Int. Conf. on Information Processing in Sensor Networks (IPSN’11), Chicago, IL, April 2011.

38. Quanquan Gu, Zhenhui Li, and Jiawei Han, "Generalized Fisher Scorefor Feature Selection", in Proc. of 2011 Int. Conf. on Uncertainty in Artificial Intelligence (UAI’11), Barcelona, Spain, July 2011.

39. Xin Jin, Jiebo Luo, Jie Yu, Gang Wang, Dhriaj Joshi, and Jiawei Han, "Reinforced Similarity Integration in Image-Rich Information Networks", IEEE Transactions on Knowledge and Data Engineering (TKDE), accepted July 2011.

40. Manish Gupta and Jiawei Han, "Heterogeneous Network-Based Trust Analysis: A Survey", SIGKDD Explorations, 13(1):60-77, July 2011.

41. Marina Danilevsky, Joshua Haipern and Jiawei Han, "SCENE: Structural Conversation Evolution Network", in Proc. of 2011 Int. Conf. on Advances in Social Network Analysis and Mining (ASONAM’11), Kaohsiung, Taiwan, July 2011. [slides]

42. Manish Gupta, Charu Aggarwal, Jiawei Han and Yizhou Sun, "Evolutionary Clustering and Analysis of Bibliographic Networks", in Proc. of 2011 Int. Conf. on Advances in Social Network Analysis and Mining (ASONAM’11), Kaohsiung, Taiwan, July 2011. [Best Paper Award Finalists]

43. Yizhou Sun, Rick Barber, Manish Gupta, Charu Aggarwal and Jiawei Han, "Co-Author Relationship Prediction in Heterogeneous Bibliographic Networks", in Proc. of 2011 Int. Conf. on Advances in Social Network Analysis and Mining (ASONAM’11), Kaohsiung, Taiwan, July 2011. [slides]

44. Chi Wang, Jie Tang, Jimeng Sun and Jiawei Han, "Dynamic Social Influence Analysis through Time-Dependent Factor Graphs", in Proc. of 2011 Int. Conf. on Advances in Social Network Analysis and Mining (ASONAM’11), Kaohsiung, Taiwan, July 2011. [slides]

45. Xiao Yu, Ang Pan, Lu-An Tang, Zhenhui Li and Jiawei Han, "Geo-Friends Recommendation in GPS-based Cyber-Physical Social Network", in Proc. of 2011 Int. Conf. on Advances in SocialNetwork Analysis and Mining (ASONAM’11), Kaohsiung, Taiwan, July 2011. [slides]

46. Yang Yang, Yizhou Sun, Saurav Pandit, Nitesh Chawla and Jiawei Han, "Is Objective Function the Silver Bullet? A Case Study of Community Detection Algorithms on Social Networks", in Proc. of 2011 Int. Conf. on Advances in Social Network Analysis and Mining (ASONAM’11), Kaohsiung, Taiwan, July 2011. (short paper)

47. Hongbo Deng, Jiawei Han, Bo Zhao, "Collective Topic Modeling for Heterogeneous Networks", in Proc.of 2011 Int. ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’11), Beijing, China, July 2011. (poster paper)

48. Ming Ji, Jun Yan, Xiaofei He, Jiawei Han, Siyu Gu, "Learning Search Tasks in Queries and Web Pages via Graph Regularization", in Proc. of 2011 Int. ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’11), Beijing, China, July 2011. [slides]

49. Sangkyum Kim, Hyungsoo Kim, Tim Wenerging, Jiawei Han, Hyun Duk Kim, "Authorship Classification: A Discriminative Syntactic Tree Mining Approach", in Proc. of 2011 Int. ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’11), Beijing, China, July 2011.

50. Chi Wang, Rajat Raina, David Fong, Ding Zhou, Jiawei Han, Greg Badros, "Learning Relevance in a Heterogeneous Social Network and Its Application in Online Targeting", in Proc. of 2011 Int. ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’11), Beijing, China, July 2011 [slides]

51. Hongbo Deng, XiangChen Zhang, Jiawei Han, Chi Wang, "Learning Online Discussion Structures by Conditional Random Fields", in Proc. of 2011 Int. ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’11), Beijing, China, July 2011. [slides]

52. Quanquan Gu, Zhenhui Li and Jiawei Han, "Joint Feature Selection and Subspace Learning", in Proc. of 2011 Int. Joint Conf. on Artificial Intelligence (IJCAI’11), Barcelona, Spain, July 2011.

53. Quanquan Gu, Chris Ding and Jiawei Han, "On Trivial Solution and Scale Transfer Problems in Graph Regularized NMF", in Proc. of 2011 Int. Joint Conf. on Artificial Intelligence (IJCAI’11), Barcelona, Spain, July 2011.


55. Mohammad Mehedy Masud, Clay Woolam, Jing Gao, Laiifur Khan, Jiawei Han,Kevin W. Hamlen, and Nikunj C. Oza, "Facing the Reality of Data Stream Classification: Coping with Scarcity of Labeled Data", Knowledge and Information Systems (KAIS), accepted, June 2011.

56. Sangkyum Kim, Winnie Cheng, Shang Guo, Laura Luan, Daniela Rosu, Abhijit Bose, "Polygraph: System for Dynamic Reduction of False Alerts in Large-Scale IT Service Delivery Environments", in Proc. of 2011 USENIX Annual Technical Conference (USENIX ATC’11), Portland, OR, June 2011 (Short paper)

57. Peixiang Zhao, Xiaolei Li, Dong Xin, and Jiawei Han, "Graph Cube: On Warehousing and OLAP Multidimensional Networks", in Proc. of 2011 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’11), Athens, Greece, June 2011 [slides]
58. Bolin Ding, Marianne Winslett, Jiawei Han, and Zhenhui Li. "Differentially Private Data Cube: Optimizing Noise Source and Consistency", in Proc. of 2011 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'11), Athens, Greece, June 2011. [slides]
59. Tim Weninger, Marina Danilevsky, Fabio Fumarola, Joshua Halpern, Jiawei Han, Ming Ji, Thomas J. Johnston, Surya Kallumadi, Hyungsul Kim, Zhijin Li, David McCluskey, Yizhou Sun, Nathan E. TeGrouthenhuis, Chi Wang, and Xiao Yu, "WinaCS: Construction and Analysis of Web-Based Computer Science Information Networks", in Proc. of 2011 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'11), (system demopaper), Athens, Greece, June 2011.
61. Latifur Khan, Wei Fan, Jiawei Han, Jing Gao, Mohammad Mehedy Masud, "Data Stream Mining: Challenges and Techniques", (tutorial), The 15th Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD 2011), Shenzhen, China, May 2011
62. Hossein Ahmadi, Tarek Abdelzaher, Jiawei Han, Raghu K. Ganti, and Nam Pham, "On Reliable Modeling of Open Cyber-physical Systems and its Application to Green Transportation", in Proc. of 2011 ACM/IEEE Int. Conf. on Cyber-Physical Systems (ICCPP'11), Chicago, IL, Apr. 2011
63. Jiawei Han, "Exploring the Power of Heterogeneous Information Networks in Data Mining", in Proc. of 2011 SIAM Conf. on Data Mining (SDM'11), Phoenix, AZ, Apr. 2011
64. Ning, Liangliang Cao, Jiawei Han, Jiebo Luo, and Thomas Huang. "Diversified Trajectory Pattern Ranking in Geo-tagged Social Media", in Proc. of 2011 SIAM Conf. on Data Mining (SDM'11), Phoenix, AZ, Apr. 2011.
65. Hyungsul Kim, Manish Marwah, Martin Arlitt, Geoff Lyon, and Jiawei Han, "Unsupervised Disaggregation of Low Frequency Power Measurements", in Proc. of 2011 SIAM Conf. on Data Mining (SDM'11), Phoenix, AZ, Apr. 2011
66. David Lo, Bolin Ding, Lucia, and Jiawei Han, "Bidirectional Mining of Non-Redundant Recurrent Rules from a Sequence Database" Proc. of 2011 Int. Conf. on Data Engineering (ICDE'10), Hannover, Germany, Apr. 2011.
67. Qiang Lu, Feida Zhu, Xifeng Yan, Jiawei Han, Philip S. Yu, and Hongyan Li, "Efficient Topological OLAP on Information Networks", in Proc. of 2011 Int. Conf. on Database Systems for Advanced Applications (DASFAA'10), Hong Kong, Apr. 2011
68. Weizhong Dong, Arnd Christian Konig, "Fast Set Intersection in Memory", accepted by PVLDB, 2011
69. Jie Yu, Xin Jin, Jiawei Han, Jiebo Luo, "Collection-based Sparse Label Propagation and Its Application on Social Group Suggestion using Laplacian Regularization. IEEE Transactions on Pattern Analysis and Machine Intelligence, 2011. To appear.
70. Xin Jin, Sangkyum Kim, Jiawei Han, Liangliang Cao, and Zhijun Yin, "Efficient Clustering of Large Datasets Based on Activity Detection Mining", Statistical Analysis and Data Mining,4(1):11-29, 2011

2010

1. Tim Weninger, Fabio Fumarola, Rick Barber, Jiawei Han, Donato Malerba, "Unexpected Results in Automatic List Extraction on the Web" , SIGKDD Explorations, 12(2), Dec. 2010.
2. Manish Gupta, Rui Li, Zhijun Yin, and Jiawei Han, "Survey on Social Tagging Techniques", SIGKDDExplanations, 12(1):58-72, 2010.
3. Heli Sun, Jianbin Huang, Jiawei Han, Hongbo Deng, Peixiang Zhao, and Boqin Feng, "gSkeleton-Clu: Density-based Network Clustering via Structure-Connected Tree Division or Agglomeration", in Proc. of 2010 Int. Conf. on Data Mining (ICDM'10), Sydney, Australia, Dec. 2010.
4. Mohammad Masud, Qing Chen, Latifur Khan, Charu Aggarwal, Jing Gao, Jiawei Han, and Bhavani Thuraisingham, "Addressing Concept-Evolution in Concept-Drifting Data Streams", in Proc. of 2010 Int. Conf. on Data Mining (ICDM'10), Sydney, Australia, Dec.2010.
5. Bolin Ding and Arnd Christian Konig, "Fast Set Intersection in Memory", accepted by PVLDB, 2011
6. Jie Yu, Xin Jin, Jiawei Han, Jiebo Luo, "Collection-based Sparse Label Propagation and Its Application on Social Group Suggestion from Photos", ACM Transactions on Intelligent Systems and Technology (TIST), 2(2), 2011.
8. Xin Jin, Sangkyum Kim, Jiawei Han, Liangliang Cao, and Zhijun Yin. "Efficient Clustering of Large Datasets Based on Activity Detection Mining", Statistical Analysis and Data Mining, 4(1):11-29, 2011.
12. Xin Jin, Andrew Gallagher, Liangliang Cao, Jiebo Luo, and Jiawei Han, "The Wisdom of Social Multimedia: Using Flickr for Prediction and Forecast", in Proc. 2010 ACM Multimedia Int. Conf. (ACM-Multimedia'10), Florence, Italy, Oct. 2010.
13. Ming Ji, Yizhou Sun, Marina Danilevsky, Jiawei Han, and Jing Gao, "Graph Regularized Transductive Classification on Heterogeneous Information Networks", in Proc. 2010 European Conf. on Machine Learning and Principles of Practice of Knowledge Discovery in Databases (ECMLPKDD'10), Barcelona, Spain, Sept. 2010.
14. Hyung Sul Kim, Sangkyum Kim, Tim Weninger, Jiawei Han, and Tarek Abdelzaher, "NDPMine: Efficiently Mining Discriminative Numerical Features for Pattern-Based Classification", in Proc. 2010 European Conf. on Machine Learning and Principles of Practice of Knowledge Discovery in Databases (ECMLPKDD'10), Barcelona, Spain, Sept. 2010.
15. Mohammad M. Masud, Qing Chen, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "Classification and Novel Class Detection of Data Streams in a Dynamic Feature Space", in Proc. 2010 European Conf. on Machine Learning and Principles of Practice of Knowledge Discovery in Databases (ECMLPKDD'10), Barcelona, Spain, Sept. 2010.
17. Zhenhui Li, Bolin Ding, Jiawei Han, and Roland Kays, "Swarm: Mining Relaxed Temporal Moving Object Clusters", in Proc. 2010 Int. Conf. on Very Large Data Bases (VLDB'10), Singapore, Sept. 2010.
18. Peixiang Zhao and Jiawei Han, "OnGraph Query Optimization in Large Networks", in Proc. 2010 Int. Conf. on Very Large Data Bases (VLDB’10), Singapore, Sept. 2010 [slides]
19. Zhijun Yin, Manish Gupta, Tim Weninger, and Jiawei Han, "A Unified Framework for Link Recommendation Using Random Walks", in Proc. 2010 Int. Conf. on Advances in Social NetworksAnalysis and Mining (ASONAM'10), Odense, Denmark. Aug. 2010.
20. Sangkyum Kim, Xin Jin, and Jiawei Han, "DisIClass: Discriminative Frequent Pattern-Based Image Classification", in Proc. 2010 KDD Workshop on Multimedia Data Mining (MMDM'10), Washington, D.C., July 2010.
21. Jiawei Han, "Mining Useful Patterns: An Evolutionary View", (Keynote Speech), in 2010 SIGKDD workshop on Useful Patterns (UP’10), Washington D.C., July 2010.
22. Yizhou Sun, Jie Tang, Jiawei Han, Manish Gupta, and Bo Zhao, "Community Evolution Detection in Dynamic Heterogeneous Information Networks", in Proc. 2010 KDD Workshop on Mining and Learning with Graphs (MLG’10), Washington, D.C., July 2010.
23. Tim Weninger, Surya Ramachandran, Daniel Greene, Jack Hart, Anand Kancherlapalli, William H. Hsu, and Jiawei Han, "Speech-Assisted Radiology System for Retrieval, Reporting, and Annotation", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’10), (demo paper), Washington D.C., July 2010.
24. Jing Gao, Feng Liang, Wei Fan, Chi Wang, Yizhou Sun, and Jiawei Han, "Community Outliers and their Efficient Detection in Information Networks", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’10), Washington D.C., July 2010.
25. Zhenhui Li, Bolin Ding, Qing Chen, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "Classification and Novel Class Detection in Data Streams with Active Mining", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’10), Washington D.C., July 2010.
26. Cindy Xide Lin, Bo Zhao, Qiaozhu Mei, and Jiawei Han, "A Statistical Model for Popular Event Tracking in Social Communities", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’10), Washington D.C., July 2010.
27. Chi Wang, Jiawei Han, Yuntao Jia, Jie Tang, Duo Zhang, Yintao Yu, and Jingyi Guo, "Mining Advisor-Advisee Relationships from Research Publication Networks", in Proc. 2010 ACM SIGKDDConf. on Knowledge Discovery and Data Mining (KDD’10), Washington D. C., July 2010.
28. Jiawei Han, Yizhou Sun, Xifeng Yan, and Philip S. Yu, "Mining Heterogeneous Information Networks", Tutorial at the 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’10), Washington, D.C., July 2010.
29. Zhenhui Li, Ming Ji, Jae-Gil Lee, LuAn Tang, Yintao Yu, Jiawei Han, and Roland Kays, "MoveMine: Mining Moving Object Databases" (system demo), in Proc. 2010 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’10), Indianapolis, Indiana, June 2010.
30. Jiawei Han, Yizhou Sun, Xifeng Yan, and Philip S. Yu, "Mining Knowledge from Databases: An Information Network Analysis Approach" (tutorial), in Proc. 2010 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’10), Indianapolis, Indiana, June 2010. (Slides)
31. Mohammad M. Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "Classification and Novel Class Detection in Data Streams with Active Mining", in Proc. 2010 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD’10), Hyderabad, India, June 2010.
32. Cindy Xide Lin, Yintao Yu, Jiawei Han, and Bing Liu, "Hierarchical Clustering of Webpages via Cross-Page andIn-Page Link Structures", in Proc. 2010 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD’10), Hyderabad, India, June 2010.
33. Jing Gao, Wei Fan, and Jiawei Han, "On the Power of Ensemble: Supervised and Unsupervised Methods Reconciled", Tutorial at 2010 SIAM Data Mining Conf. (SDM’10), Columbus, Ohio, May 2010.
34. Jiawei Han, "Data Mining: Dynamic Past and Promising Future", Panel Talk at 2010 SIAM Data Mining Conf. (SDM’10), Columbus, Ohio, April 2010.
35. Mohammad M. Masud, Hieu K. Le, Michael LeMay, Parya Moizadeh, Lili Wang, Yong Yang, Dong K. Noh, Tarek Abdelzaher, Carl A. Gunter, Jiawei Han, Xin Jin, "Diagnostic Powertracing for Sensor Node Failure Analysis", in Proc. 2010 Int. Conf. on Information Processing in Sensor Networks (IPSN’10), Stockholm, Sweden, April, 2010.
36. Xin Jin, Scott Spangler, Rui Ma, and Jiawei Han, "Topic Initiator Detection on the World Wide Web", in Proc. 2010 Int. World Wide Web Conf. (WWW’10), Raleigh, NC, April 2010.
37. Tim Weninger, William H. Hsu, and Jiawei Han, "CETR Content Extraction via Tag Ratios", in Proc.2010 Int. World Wide Web Conf. (WWW’10), Raleigh, NC, April 2010.
38. Xin Jin, Jiebo Luo, Jie Yu, Gang Wang, Dhiraj Joshi, and Jiawei Han, "IRIN: Image Retrieval in Image Rich Information Networks", in Proc. 2010 Int. World Wide Web Conf. (WWW’10), Raleigh, NC, April 2010. (demo paper)
39. Zhenhui Li, Ding Zhou, YunFang Juan, and Jiawei Han, "KeyWord Extraction for Social Snippets", in Proc. 2010 Int. World Wide Web Conf. (WWW’10), Raleigh, NC, April 2010. (poster paper)
40. Liangliang Cao, Andrey Del Pozo, Xin Jin, Jiebo Luo, Jiawei Han, and Thomas S. Huang, "RankCompete: Simultaneous Ranking and Clustering of Web Photos", in Proc. 2010 Int. World Wide Web Conf. (WWW’10), Raleigh, NC, April 2010. (poster paper)
41. Cindy Xide Lin, Bo Zhao, Tim Weninger, Jiawei Han, and Bing Liu, "Entity Relation Discovery from Web Tables and Links", in Proc. 2010 Int. World Wide Web Conf. (WWW’10), Raleigh, NC, April 2010. (poster paper)
42. Zhijun Yin, Manish Gupta, Tim Weninger, and Jiawei Han, "LINKREC: A Unified Framework for Link Recommendation with User Attributes and Graph Structure", in Proc. 2010 Int. World Wide Web Conf. (WWW’10), Raleigh, NC, April 2010. (poster paper)
43. Jie Yu, Xin Jin, Jiawei Han, and Jiebo Luo, "Social Group Suggestion from User Image Collections", in Proc. 2010 Int. World Wide Web Conf. (WWW’10), Raleigh, NC, April 2010. (poster paper)
44. Liangliang Cao, Jiebo Luo, Andrew Gallagher, Xin Jin, Jiawei Han, and Thomas S. Huang, "A Worldwide Tourism Recommendation System Based on Geotagged Web Photos", in Proc. 2010 Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP’10), Dallas, TX, March 2010.
45. Jiawei Han, Zhenhui Li, and Lu An Tang, "Mining Moving Object and Traffic Data", in Proc. 2010 Int. Conf. on Database Systems for Advanced Applications (DSFAA’10), (Conference Tutorial), Tsukuba, Japan, April 2010.

46. Zhenhui Li, Jae-Gil Lee, Xiaolei Li, and Jiawei Han, "Incremental Clustering for Trajectories", in Proc. 2010 Int. Conf. on Database Systems for Advanced Applications (DSFAA’10), Tsukuba, Japan, April 2010.

47. Lu Liu, Feida Zhu, Chen Chen, Xifeng Yan, Jiawei Han, Philip Yu, and Shiqiang Yang, "Mining Diversity on Networks", in Proc. 2010 Int. Conf. on Database Systems for Advanced Applications (DSFAA’10), Tsukuba, Japan, April 2010.

48. Cuiping Li, Jiawei Han, Xin Jin, Yizhou Sun, Yintao Yu, and Tianyi Wu, "Fast Computation of SimRank for Static and Dynamic Information Networks", in Proc. 2010 Int. Conf. on Extending Data Base Technology (EDBT’10), Lausanne, Switzerland, March 2010.

49. Tianyi Wu, Yizhou Sun, Cuiping Li, and Jiawei Han, "Region-based Online Promotion Analysis", in Proc.2010 Int. Conf. on Extending Data Base Technology (EDBT’10), Lausanne, Switzerland, March 2010.

50. Hyun Duk Kim, ChengXiang Zhai and Jiawei Han, "Aggregation of Multiple Judgments for Evaluating Ordered Lists", in Proc. 2010 European Conf. on Information Retrieval (ECIR’10), Milton Keynes, UK, March 2010.

51. Dustin Bortner and Jiawei Han, "Progressive Clustering of Networks Using Structure-Connected Order of Traversal", in Proc. 2010 Int. Conf. on Data Engineering (ICDE’10), Long Beach, CA, March 2010.

52. Bolin Ding, Bo Zhao, Cindy Xide Lin, Jiawei Han, Chengxiang Zhai, "TopCells: Keyword-Based Search of Top-k Aggregated Documents in Text Cube", in Proc. 2010 Int. Conf. on Data Engineering (ICDE’10), Long Beach, CA, March 2010.

53. Xifeng Yan, Bin He, Feida Zhu, Jiawei Han, "Top-K Aggregation Queries Over Large Networks", in Proc.2010 Int. Conf. on Data Engineering (ICDE’10), Long Beach, CA, March 2010.

54. Lu Liu, Feida Zhu, Meng Jiang, Jiawei Han, Lifeng Sun, and Shiqiang Yang, "Mining diversity on social media networks", Multimedia Tools and Applications, accepted, 2010.

55. Mohammad M. Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "Classification and Novel Class Detection in Concept-Drifting Data Streams under Time Constraints", IEEE Transactions on Knowledge and Data Engineering, accepted Feb. 2010.

56. Deng Cai, Xiaolei He, and Jiawei Han, "Locally Consistent Concept Factorization for Document Clustering", IEEE Transactions on Knowledge and Data Engineering, 22, 2010, accepted 14-Jan-2010.

57. Charu C. Aggarwal, Chen Chen and Jiawei Han, "The Inverse Classification Problem", Journal of Computer Science and Technology, accepted Dec. 2009.

58. Hector Gonzalez, Jiawei Han, Hong Cheng, Xiaolei Li, Diego Klabjan, and Tianyi Wu, "Modeling Massive RFID Datasets: A Gateway-Based Movement-Graph Approach", IEEE Transactions on Knowledge and Data Engineering, 22(1):90-104, 2010.

59. Tianyi Wu, Yuguo Chen, and Jiawei Han, "Re-Examination of Interestingness Measures in Pattern Mining: A Unified Framework", Data Mining and Knowledge Discovery, 21(3):371-397, DOI: 10.1007/s10618-009-0161-2 Jan. 2010.

2009

1. Yizhou Sun, Jiawei Han, Jing Gao, and Yintao Yu, "TopicModel: Information Network-Integrated Topic Modeling", in Proc. 2009 Int. Conf. on Data Mining (ICDM’09), Miami, FL, Dec. 2009.

2. Xiao Yu, Lu An Tang, and Jiawei Han, "Filtering and Refinement: A Two-Stage Approach for Efficient and Effective Anomaly Detection", in Proc. 2009 Int. Conf. on Data Mining (ICDM’09), Miami, FL, Dec. 2009.

3. Samson Hauguel, ChengXiang Zhai, and Jiawei Han, "Parallel PathFinder Algorithms for Mining Structures from Graphs", in Proc. 2009 Int. Conf. on Data Mining (ICDM’09), Miami, FL, Dec. 2009.

4. Jing Gao, Feng Liang, Wei Fan, Yizhou Sun, and Jiawei Han, "Graph-based Consensus Maximization among Multiple Supervised and Unsupervised Models", in Proc. NIPS 2009 Neural Info. Processing Systems Conf. (NIPS’09), Vancouver, B.C., Canada, Dec. 2009.

5. Peixiang Zhao, Jiawei Han, Yizhou Sun, "P-Rank: A Comprehensive Structural Similarity Measure over Information Networks", in Proc. 2009 ACM Conf. on Information and Knowledge Management (CIKM’09), Hong Kong, China, Nov. 2009.

6. Tianyi Wu and Jiawei Han, "Subspace Discovery for Promotion: A Cell Clustering Approach", in Proc. 12th Int. Conf. on Discovery Science (DS’09), Porto, Portugal, Oct. 2009.

7. Min-Soo Kim and Jiawei Han, "CHRONICLE: A Two-Stagedensity-based Clustering Algorithm for Dynamic Networks", in Proc. 12th Int. Conf. on Discovery Science (DS’09), Porto, Portugal, Oct. 2009.

8. Jiang Huang, "Mining Heterogeneous Information Networks: Methods by Exploring the Power of Links", in Proc. 12th Int. Conf. on Discovery Science (DS’09), Porto, Portugal, Oct. 2009. (Invited talk)

9. Chandrasekhar Ramachandran, Rahul Malik, Xin Jin, Jing Gao, Klara Nahrstedt, and Jiawei Han, "VideoMule: A Consensus Learning Approach to Multi-Label Classification from Noisy User-Generated Videos", in Proc. 2009 ACM Int. Conf. on Multimedia (ACM-MM’09), Beijing, China, Oct. 2009.

10. Mohammad M. Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "Integrating Novel Class Detection with Classification for Concept-Drifting Data Streams", in Proc. 2009 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD’09), Bled, Slovenia, Sept. 2009.

11. Min-Soo Kim and Jiawei Han, "A Particle- and Density-Based Evolutionary Clustering Method for Dynamic Networks", in Proc. 2009 Int. Conf. on Very Large Data Bases (VLDB’09), Lyon, France, Aug. 2009.

12. Tianyi Wu, Dong Xin, Qiaozhu Mei, and Jiawei Han, " Promotion Analysis in Multi-Dimensional Space", in Proc. 2009 Int. Conf. on Very Large Data Bases (VLDB’09), Lyon, France, Aug. 2009.

13. Chen Chen, Cindy Xide Lin, Matt Fredrikson, Mihai Cristodorescu, Xifeng Yan, and Jaewi Han, "Mining Graph Patterns Efficiently via Randomized Summaries", in Proc. 2009 Int. Conf. on Very Large Data Bases (VLDB’09), Lyon, France, Aug. 2009.

14. Yintao Yu, Cindy Xide Lin, Yizhou Sun, Chen Chen, Jiawei Han, Binbin Liao, Tianyi Wu, ChengXiang Zhai, Diao Zhang, and Bo Zhao, "In extCube: Information Network-Enhanced Text Cube", in Proc. 2009 Int. Conf. on Very Large Data Bases (VLDB’09) (system demo), Lyon, France, Aug. 2009.

15. David Lo, Hong Cheng, Jiawei Han, SiauCheng Khoo, and Chengnian Sun, "Classification of Software Behaviors for Failure Detection: A Discriminative Pattern Mining Approach", in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’09), Paris, France, June 2009.

16. Yizhou Sun, Yintao Yu, and Jiawei Han, "Ranking-Based Clustering of Heterogeneous Information Networks with Star Network Schema", in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’09), Paris, France, June 2009.

17. Zhenhui Li, Feng Liang, Qiaozhu Mei, and Jiawei Han, "Exploiting Social Tagging Graph for Web Object Classification", in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’09), Paris, France, June 2009.
18. Jing Gao, Wei Fan, Yizhou Sun, and Jiawei Han, "Heterogeneous Source Consensus Learning via Decision Propagation and Negotiation", in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'09), Paris, France, June 2009.
19. Deng Cai, Xiaofei He, Xuanhui Wang, Hujun Bao, Jiawei Han, "Locality Preserving Nonnegative Matrix Factorization", in Proc. 2009 Int. Joint Conf. on Arti_cial Intelligence(UCAI-09), Pasadena, CA, July 2009.
20. Mohammad Maifi Hasan Khan, Tarek Abdelzaher, Jiawei Han, and Hossein Ahmadi, "Finding Symbolic Bug Patterns in Sensor Networks", in Proc. 2009 IEEE Int. Conf. on Distributed Computing in Sensor Systems (DCOSS '09), Marina Del Rey, CA, June 2009.
21. Jing Gao, Guofei Jiang, Haifeng Chen, and Jiawei Han, "Modeling Probabilistic Measurement Correlations for Problem Determination in Large-Scale Distributed Systems", in Proc. 2009 Int. Conf. on Distributed Computing Systems (ICDCS'09), Montreal, Quebec, Canada, June 2009.
22. Mohammad M Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "A Multi-Partition Multi-Chunk Ensemble Technique to Classify Concept-Drifting Data Streams", in Proc. 2009 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD’09), Bangkok, Thailand, Apr. 2009.
23. Xin Jin, Sangkyum Kim, Jiawei Han, Liangliang Cao, and Zhijun Yin, "GAD: General Activity Detection for Fast Clustering on Large Data", in Proc. 2009 SIAM Int. Conf. on Data Mining (SDM’09), Sparks, NV, April 2009.
24. Marisa Thoma, Hong Cheng, Arthur Grettel, Jiawei Han, Hans-Peter Kriegel, Alexander J. Smola, Le Song, Philip S. Yu, Xifeng Yan, and Kaspar Moro, "Near-Optimal SupervisedFeature Selection among Frequent Subgraphs", in Proc. 2009 SIAM Int. Conf. on Data Mining (SDM’09), Sparks, NV, April 2009.
25. Duo Zhang, Chengxiang Zhai and Jiawei Han, "Topic Cube: Topic Modeling for OLAP on Multidimensional Text Databases", in Proc. 2009 SIAM Int. Conf. on Data Mining (SDM’09), Sparks, NV, April 2009.
26. Yizhou Sun, Jiawei Han, Peixiang Zhao, Zhijun Yin, Hong Cheng, Tianyi Wu, "RankClus: Integrating Clustering with Ranking for Heterogeneous Information Network Analysis", in Proc. 2009 Int. Conf. on Extending Data Base Technology (EDBT’09), Saint-Petersburg, Russia, Mar. 2009.
27. Jiawei Han, Xifeng Yan, and Philip S. Yu, "Scalable OLAP and Mining of Information Networks", 2009 Int. Conf. on Extending Data Base Technology (EDBT’09), Saint-Petersburg, Russia, Mar. 2009.
28. Bolin Ding, David Lo, Jiawei Han, and Siuang-Cheng Kho, "Efficient Mining of Closed Repetitive Gapped Subsequences from a Sequence Database", in Proc. 2009 Int. Conf. on Data Engineering (ICDE’09), Shanghai, China, Mar. 2009.
29. Xiaolei Li, Zhenhui Li, Jiawei Han, and JaeGil Lee, "Temporal Outlier Detection in Vehicle Traffic Data", in Proc. 2009 Int. Conf. on Data Engineering (ICDE’09), Shanghai, China, Mar. 2009.
30. Jiawei Han and Jing Gao, "Research Challenges for Data Mining in Science and Engineering", in H. Kargupta, et al., (eds.), Next Generation of Data Mining, Chapman & Hall, 2009.
31. Feida Zhu, Xifeng Yan, Jiawei Han, and Philip S. Yu, "Mining Frequent Approximate Sequential Patterns", in H. Kargupta, et al., (eds.), Next Generation of Data Mining, Chapman & Hall, 2009.
32. Chen Chen, Xifeng Yan, Feida Zhu, Jiawei Han, and Philip S. Yu, "Graph OLAP: A Multi-Dimensional Framework for Graph Data Analysis", accepted by Knowledge and Information Systems (KAIS), 2009.

2008

1. Chen Chen, Xifeng Yan, Feida Zhu, Jiawei Han, and Philip S. Yu, "Graph OLAP: Towards Online Analytical Processing on Graphs", in Proc. 2008 Int. Conf. on Data Mining (ICDM’08), Pisa, Italy, Dec. 2008.
2. Deng Cai, Xiaofei He, Xiaoyun Wu, and Jiawei Han, "Non-negative Matrix Factorization on Manifold", in Proc. 2008 Int. Conf. on Data Mining (ICDM’08), Pisa, Italy, Dec. 2008.
3. Cindy Xide Lin, Bolin Ding, Jiawei Han, Feida Zhu, and Bo Zhao, "Text Cube: Computing IR Measures for Multidimensional Text Database Analysis", in Proc. 2008 Int. Conf. on Data Mining (ICDM’08), Pisa, Italy, Dec. 2008.
4. Luiz Mendes, Bolin Ding, and Jiawei Han, "Stream Sequential Pattern Mining with Precise Error Bounds", in Proc. 2008 Int. Conf. on Data Mining (ICDM’08), Pisa, Italy, Dec. 2008.
5. Mohammad Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "A Practical Approach to Classifying Evolving Data Streams: Training with Limited Amount of Labeled Data", in Proc. 2008 Int. Conf. on Data Mining (ICDM’08), Pisa, Italy, Dec. 2008.
6. Jing Gao, Bolin Ding, Wei Fan, Jiawei Han, and Philip S. Yu, "Classifying Data Streams with Skewed Class Distribution and Concept Drifts", IEEE Internet Computing (Special Issue on Data Stream Management), 12(6): 37-49, 2008
7. Mohammad Maifi Hasan Khan, Hieu Le, Hossein Ahmadi, Tarek Abdelzaher, and Jiawei Han, "DustMiner: Troubleshooting Interactive Complexity Bugs in Sensor Networks", in Proc. 2008 ACM Int. Conf. on Embedded Networked Sensor Systems (Sensys’08), Raleigh, NC, Nov. 2008.
8. Chen Chen, Cindy Xide Lin, Xifeng Yan, and Jiawei Han, "On Effective Presentation of Graph Patterns: A Structural Representative Approach", in Proc. 2008 ACM Conf. on Information and Knowledge Management (CIKM’08), Napa Valley, CA, Oct. 2008.
9. Deng Cai, Qiaozhu Mei, Jiawei Han, and ChengXiang Zhai, "Modeling Hidden Topics on Document Manifold", in Proc. 2008 ACM Conf. on Information and Knowledge Management (CIKM’08), Napa Valley, CA, Oct. 2008.
10. JaeGil Lee, Jiawei Han, Xiaolei Li, and Hector Gonzalez, "TraClass: Trajectory Classification Using Hierarchical Region-Based and Trajectory-Based Clustering", in Proc. 2008 Int. Conf. on Very Large Data Base (VLDB’08), Auckland, New Zealand, Aug. 2008.
11. Wei Fan, Kun Zhang, Hong Cheng, Jing Gao, Xifeng Yan, Jiawei Han, Philip S. Yu, and Olivier Verscheure, "Direct Mining of Discriminative and Essential Graphical and Itemset Features via Model-based Search Tree", in Proc. 2008 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’08), Las Vegas, NV, Aug. 2008.
12. Jing Gao, Wei Fan, Jing Jiang, and Jiawei Han, "Knowledge Transfer via Multiple Model Local Structure Mapping", in Proc. 2008 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’08), Las Vegas, NV, Aug. 2008.
13. Bin Jiang, Jian Pei, Xuemin Lin, David W. Cheung, and Jiawei Han, "Mining Preferences from Superior and Inferior Examples", in Proc. 2008 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’08), Las Vegas, NV, Aug. 2008.
14. Deng Cai, Xiaofei He, and Jiawei Han, "Sparse Projections over Graph", in Proc. 2008 AAAI Conf. on Artificial Intelligence (AAAI-08), Chicago, Illinois, July 2008.
15. Sangkyum Kim, Jaebum Kim, Younhee Ko, Seung-won Kwang and Jiawei Han, "PerRank: Personalized Rank Retrieval with Categorical and Numerical Attributes", in Proc. 2008 Int. Conf.on Web-Age Information Management (WAIM’08), Zhangjiajie, China, July 2008.
2007

1. Deng Cai, Xiaofei He, Wei Vivian Zhang, and Jiawei Han, "Regularized Locality Preserving Indexing", in Proc. 2007 ACM Int. Conf. on Information and Knowledge Management (CIKM'07), Lisboa, Portugal, Nov. 2007.

2. Deng Cai, Xiaofei He, and Jiawei Han, "A Unified Approach for Sparse Subspace Learning", in Proc. 2007 Int. Conf. on Data Mining (ICDM'07), Omaha, NE, Oct. 2007.

3. Jing Gao, Wei Fan, and Jiawei Han, "On Appropriate Assumptions to Mine Data Streams: Analysis and Practice", in Proc. 2007 Int. Conf. on Data Mining (ICDM'07), Omaha, NE, Oct. 2007.

4. Deng Cai, Xiaofei He, and Jiawei Han, "Efficient Kernel Discriminant Analysis via Spectral Regression", in Proc. 2007 Int. Conf. on Data Mining (ICDM'07), Omaha, NE, Oct. 2007.

5. Chen Chen, Xifeng Yan, Feida Zhu, and Jiawei Han, "gApprox: Mining Frequent Approximate Patterns from a Massive Network", in Proc. 2007 Int. Conf. on Data Mining (ICDM'07), Omaha, NE, Oct. 2007.

6. Feida Zhu, Xifeng Yan, Jiawei Han, and Philip S. Yu, "Efficient Discovery of Frequent Approximate Sequential Patterns", in Proc. 2007 Int. Conf. on Data Mining (ICDM'07), Omaha, NE, Oct. 2007.

7. Chao Liu, Tao Xie, and Jiawei Han, "Mining for Software Reliability", ICDM'2007 Conference Tutorial, Omaha, NE, Oct. 2007.

8. Deng Cai, Xiaofei He, and Jiawei Han, "Spectral Regression for Efficient Regularized Subspace Learning", in Proc. 2007 IEEE Int. Conf. on Computer Vision (ICCV'07), Rio de Janeiro, Brazil, Oct. 2007.

9. Deng Cai, Xiaofei He, and Jiawei Han, "Semi-supervised Discriminant Analysis", in Proc. 2007 IEEE Int. Conf. on Computer Vision (ICCV'07), Rio de Janeiro, Brazil, Oct. 2007.

10. Chao Liu, Xiangyu Zhang, Jiawei Han, Yu Zhang and Bharat K. Bhargava, "Failure Indexing: A Dynamic Slicing Based Approach", in Proc. 2007 IEEE Int. Conf. on Software Maintenance (ICSM'07), Paris, France, Oct. 2007.

11. Deng Cai, Xiaofei He, and Jiawei Han, "A Unified Subspace Learning Framework for Content-Based Image Retrieval", in Proc. 2007 Int. Conf. on ACM Multimedia (ACM-MM'07), Augsburg, Germany, Sept. 2007.

12. Chen Chen, Xifeng Yan, Philip S. Yu, Jiawei Han, DongQing Zhang, and Xiaohui Gu, "Towards Graph Containment Searchand Indexing" , in Proc. 2007 Int. Conf. on Very Large Data Bases (VLDB'07), Vienna, Austria, Sept. 2007.

13. Hector Gonzalez, Jiawei Han, Xiaolei Li, Margaret Mylinska, and John Paul Sondag, "Adaptive Fastest Path Computation on a Road Network: A Traffic Mining Approach", in Proc. 2007 Int. Conf. on Very Large Data Bases (VLDB'07), Vienna, Austria, Sept. 2007.

14. Xiaolei Li and Jiawei Han, "Mining Approximate Top-K Subspace Anomalies in Multi-Dimensional Time-Series Data", in Proc. 2007 Int. Conf. on Very Large Data Bases (VLDB'07), Vienna, Austria, Sept. 2007.

15. Tainyi Wu, Xiaolei Li, Dong Xin, Jiawei Han, Jacob Lee, and Ricardo Redder, "DataScope: Viewing Database Contents inGoogle Maps Way", in Proc. 2007 Int. Conf. on Very Large Data Bases (VLDB'07), Vienna, Austria, Sept. 2007 (system demo).

16. Tainyi Wu, Yuguang Chen, and Jiawei Han, "Association Mining in Large Databases: A Re-Examination of Its Measures", in Proc. 2007 Int. Conf. on Principles and Practice of Knowledge Discovery in Databases (PKDD'07), Warsaw, Poland, Sept. 2007.

17. Jiawei Han, Xiaoxin Yin, and Philip S. Yu, "Exploring the Power of Links in Data Mining", Tutorial for Proc. 2007 Int. Conf. on Principles and Practice of Knowledge Discovery in Databases (PKDD'07), Warsaw, Poland, Sept. 2007.

18. Xiaoxin Yin, Jiawei Han, and Philip S. Yu, "Truth Discovery with Multiple Conflicting Information Providers on the Web", in Proc. 2007 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'07), San Jose, CA, Aug. 2007.

19. Xiaolei Li, Jiawei Han, Jae Gil Lee, and Hector Gonzalez, "Traffic Density-based Discovery of Hot Routes in Road Networks", in Proc. 2007 ACM Int. Conf. on Spatial and Temporal Databases (SSTD'07), Boston, MA, July 2007.

20. Deng Cai, Xiaofei He and Jiawei Han, "Isometric Projection", in Proc. 2007 AAAI Conf. on Artificial Intelligence (AAAI-07), Vancouver, B. C., Canada, July 2007.
14. Jiawei Han, Hector Gonzalez, Xiaolei Li and Diego Klabjan, "Warehousing and Mining Massive RFID Data Sets", (Keynote Speech), 2006 Int. Conf. on Advance Data Mining and Its Applications (ADMA’06), Xi’an, China, Aug. 2006 (one of 6 10-year Best Papers selected at ADMA 2014).

15. Hongyan Liu, Ying Li, Jiawei Han, and Jun He, "Error-Adaptive and Time-Aware Maintenance of Frequency Count over Data Streams", in Proc. 2006 Int. Conf. on Web-Age Information Management (WAIM’06), Hong Kong, China, June, 2006.

16. Kaushik Chakrabarti, Venkatesh Ganti, Jiawei Han, and Dong Xin, "Ranking Objects Based on Relationships", in Proc. 2006 ACM SIGMOD Conf. on Management of Data (SIGMOD’06), Chicago, IL, June 2006.

17. Xiaolei Li, Jiawei Han, and Sangkyum Kim, "Motion-Alert: Automatic Anomaly Detection in Massive Moving Objects", in Proc. 2006 IEEE Int. Conf. on Intelligence and Security Informatics (ISS’06), San Diego, CA, May 2006.

18. Wen Jin, Anthony K. H. Tang, Jiawei Han, and Wei Wang, "Ranking Outliers Using Symmetric Neighborhood Relationship", in Proc. 2006 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD’06), Singapore, April 2006.

19. Hongyan Liu, Jiawei Han, Dong Xin, and Zheng Shao, "Mining Interesting Patterns from Very High Dimensional Data: A Top-Down Row Enumeration Approach," in Proc. 2006 SIAM Int. Conf. on Data Mining (SDM’06), Bethesda, MD, April 2006. (One of "Best of SDM’06")

20. Chao Liu, Xifeng Yan, and Jiawei Han, "Mining Control Flow Abnormality for Logic Error Isolation," in Proc. 2006 SIAM Int. Conf. on Data Mining (SDM’06), Bethesda, MD, April 2006.

21. Charu Aggarwal, Chen Chen, and Jiawei Han, "On the Inverse Classification Problem and its Applications", in Proc. 2006 Int. Conf. on Data Engineering (ICDE’06), Atlanta, Georgia, April 2006.

22. Hector Gonzalez, Jiawei Han, Xiaolei Li, and Diego Klabjan, "Warehousing and Analysis of Massive RFID Data Sets", in Proc. 2006 Int. Conf. on Data Engineering (ICDE’06), Atlanta, Georgia, April 2006.

23. Jiawei Han, Jiawei Han, Dong Xin, and Zheng Shao, "Top-Down Mining of Interesting Patterns from Very High Dimensional Data", in Proc. 2006 Int. Conf. on Data Engineering (ICDE’06), Atlanta, Georgia, April 2006.

24. Dong Xin, Jiawei Han, Zheng Shao, and Hongyan Liu, "C-Cubing: Efficient Computation of Closed Cubes by Aggregation-Based Checking", in Proc. 2006 Int. Conf. on Data Engineering (ICDE’06), Atlanta, Georgia, April 2006.

25. Xifeng Yan, Feida Zhu, Jiawei Han, and Philip S. Yu, "Searching Substructures with Superimposed Distance", in Proc. 2006 Int. Conf. on Data Engineering (ICDE’06), Atlanta, Georgia, April 2006.


27. Yixin Chen, Guozhu Dong, Jiawei Han, Jian Pei, Benjamin W. Wah, and Jianyong Wang, "Regression Cubes with Lossless Compression and Aggregation", IEEE Transactions on Knowledge and Data Engineering, 18(12): 1585-1599, 2006.

28. Jianyong Wang, Jiawei Han, and Jian Pei, "Closed Constrained-Gradient Mining in Retail Databases", IEEE Transactions on Knowledge and Data Engineering, 18(8): 764-769, 2006.

29. Xiaoxin Yin, Jiawei Han, Yong Yang and Philip S. Yu, "Efficient Classification across Multiple Database Relations: A CrossMine Approach", IEEE Transactions on Knowledge and Data Engineering, 18(6): 770-783, 2006.

30. Charu Aggarwal, Jiawei Han, Jianyong Wang, and Philip S. Yu, "A Framework for On-Demand Classification of Evolving Data Streams", IEEE Transactions on Knowledge and Data Engineering, 18(5):577-789, 2006.

2005

1. Deng Cai, Zheng Shao, Xiaofei He, Xifeng Yan, Jiawei Han, "Community Mining from Multi-Relational Networks", in Proc. 2005 European Conf. on Principles and Practice of Knowledge Discovery in Databases (PKDD’05), Porto, Portugal, Oct., 2005.

2. Wen Jin, Martin Ester and Jiawei Han, "Efficient Processing of Ranked Queries with Sweeping Selection", in Proc. 2005 European Conf. on Principles and Practice of Knowledge Discovery in Databases (PKDD’05), Porto, Portugal, Oct., 2005.

3. Xiaoxin Yin and Jiawei Han, "Efficient Classification from Multiple Heterogeneous Databases", in Proc. 2005 European Conf. on Principles and Practice of Knowledge Discovery in Databases (PKDD’05), Porto, Portugal, Oct., 2005.

4. Chen Chen, Dong Xin, Jiawei Han, "Accelerating DNA Sequencing by Hybridization with Noises", in Proc. 2005 ACM-SIGKDD Workshop on Data Mining in Bioinformatics (BioKDD’05), Chicago, IL, Aug. 2005.

5. Deng Cai, Zheng Shao, Xiaofei He, Xifeng Yan, Jiawei Han, "Mining Hidden Community in Heterogeneous Social Networks", in Proc. 2005 ACM-SIGKDD Workshop on Link Discovery: Issues, Approaches and Applications (LinkKDD’05), Chicago, IL, Aug. 2005.

6. H. Liu, X. Yin, J. Han, and P. S. Yu, "An Efficient Algorithm for Mining Top-K Frequent Closed Itemsets", in Proc. 2005 ACM-SIGKDD Workshop on Multi-Relational Data Mining (KDD/MDM’05), Chicago, IL, Aug. 2005.

7. J. Yang, X. Yan, J. Han, and W. Wang, "Discovering Evolutionary Classifier over High Speed Non-Static Stream", in S. Bandypadhyay et al. (eds.), Advanced Methods for Knowledge Discovery from Complex Data, Springer Verlag, 2005.

8. J. Han, J. Pei, and X. Yan, "Sequential Pattern Mining by Pattern-Growth: Principles and Extensions", in W. W. Chu and T. Y. Lin (eds.), Recent Advances in Data Mining and Granular Computing (Mathematical Aspects of Knowledge Discovery), Springer Verlag, 2005.


11. D. Cai and X. He, "Orthogonal Locality Preserving Indexing", in Proc. 2005 Int. Conf. on Very Large Data Bases (VLDB’05), Trondheim, Norway, Aug. 2005.

12. X. Han, H. Cheng, J. Han, and D. Xin, "Summarizing Itemset Patterns: A Profile-Based Approach", in Proc. 2005 Int. Conf. on Knowledge Discovery and Data Mining (KDD’05), Chicago, IL, Aug. 2005. (Best Student Paper Runner-Up Award)

13. X. Yan, X. J. Zhou, and J. Han, "Mining Closed Relational Graphs with Connectivity Constraints", in Proc. 2005 Int. Conf. on Knowledge Discovery and Data Mining (KDD’05), Chicago, IL, Aug. 2005.

14. X. Yin, J. Han, and P. S. Yu, "Cross-Relational Clustering with User’s Guidance", in Proc. 2005 Int. Conf. on Knowledge Discovery and Data Mining (KDD’05), Chicago, IL, Aug. 2005.

15. S. Cong, J. Han, and D. Padua, "Parallel Mining of Closed Sequential Patterns", in Proc. 2005 Int. Conf. on Knowledge Discovery and Data Mining (KDD’05), Chicago, IL, Aug. 2005.

16. D. Cai and X. He, "Orthogonal Locality Preserving Indexing", in Proc. 2005 Int. Conf. on Research and Development in Information Retrieval (SIGIR’05), Salvador, Brazil, Aug. 2005.

17. X. Yin, J. Han, and J. Yang, "Searching for Related Objects in Relational Databases", in Proc. 2005 Int. Conf. on Scientific and Statistical Database Management (SSDBM’05), Santa Barbara, CA, June 2005.
2004

1. W. Jin, J. Han, and M. Ester, “Mining Thick Skylines over Large Databases”, in Proc. 2004 European Conf. on Principles of Principles and Practice of Knowledge Discovery in Databases (PKDD’04), Pisa, Italy, Sept. 2004.

2. C. Aggarwal, J. Han, Wang, and P. S. Yu, “A Framework for Projected Clustering of High Dimensional Data Streams”, in Proc. 2004 Int. Conf. on VeryLarge Data Bases (VLDB’04), Toronto, Canada, Aug. 2004.

3. X. Li, J. Han, and R. Gonzalez, “High-Dimensional OLAP: A Minimal Cubing Approach”, in Proc. 2004 Int. Conf. on Very Large Data Bases (VLDB’04), Toronto, Canada, Aug. 2004.

4. C. Aggarwal, J. Han, Wang, and P. S. Yu, “On Demand Classification of Data Streams”, in Proc. 2004 Int. Conf. on Knowledge Discovery and Data Mining (KDD’04), Seattle, WA, Aug. 2004.

5. H. Cheng, X. Yan, and J. Han, "IncSpan: Incremental Mining of Sequential Patterns in Large Database", in Proc. 2004 Int. Conf. on Knowledge Discovery and Data Mining (KDD’04), Seattle, WA, Aug. 2004.

6. B. He, K.C.-C. Chang, and J. Han, "Discovering Complex Matchings across Web Query Interfaces: A Correlation Mining Approach", in Proc. 2004 Int. Conf. on Knowledge Discovery and Data Mining (KDD’04), Seattle, WA, Aug. 2004.

7. C. Li, J. Han, and J. Yang, "Clustering Moving Objects", in Proc. 2004 Int. Conf. on Knowledge Discovery and Data Mining (KDD’04), Seattle, WA, Aug. 2004.

8. A. Wu, M. Garland, and J. Han, "Mining Scale-Free Networks using Geodesic Clustering", in Proc. 2004 Int. Conf. on Knowledge Discovery and Data Mining (KDD’04), Seattle, WA, Aug. 2004.

9. J. Pei, J. Han, B. Mortazavi-Asl, J. Wang, H. Pinto, Q. Chen, U. Dayal, and M.-C. Hsu, "Mining Sequential Patterns by Pattern-Growth: The PrefixSpan Approach", IEEE Transactions on Knowledge and Data Engineering, 16(10), 2004.


11. Z. Shao, J. Han, and D. Xin, "MM-Cubing: Computing Iceberg Cubes by Factorizing the Lattice Space", in Proc. 2004 Int. Conf. on Scientific and Statistical Database Management (SSDBM’04), Santorini Island, Greece, June 2004.

12. Y. Li, J. Yang, and J. Han, "Continuous K-Nearest Neighbor Search for Moving Objects", in Proc. 2004 Int. Conf. on Scientific and Statistical Database Management (SSDBM’04), Santorini Island, Greece, June 2004.

13. J. Han, J. Pei, Y. Yin and R. Mao, “Mining Frequent Patterns without Candidate Generation: A Frequent-Pattern Tree Approach”, Data Mining and Knowledge Discovery, 8(1):53-87, 2004.

14. Y. Yan, P. S. Yu, and J. Han, "Graph Indexing: A Frequent Structure-based Approach", in Proc. 2004 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD’04), Paris, France, June 2004.


16. W.-Y. Kim, Y.-K. Lee, and J. Han, "CCMine: Efficient Mining of Confidence-Closed Correlated Patterns", in Proc. 2004 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD’04), Sydney, Australia, May 2004.

17. H. Yu, J. Han, K.-C. Chang, "PEBL: Web Page Classification Without Negative Examples", IEEE Transactions on Knowledge and Data Engineering (Special issue on Mining and Searching the Web), 16(1): 70-81, 2004.

18. G. Dong, J. Han, J. Lom, J. Pei, K. Wang, and W. Zou, "Mining Constrained Gradients in Multi-Dimensional Databases", IEEE Transactions on Knowledge and Data Engineering, 16(6), 2004.
19. X. Yin, J. Han, J. Yang, and P. S. Yu, "CrossMine: Efficient Classification across Multiple Database Relations", in Proc. 2004 Int. Conf. on Data Engineering (ICDE'04), Boston, MA, March 2004.
20. J. Wang and J. Han, "BIDE: Efficient Mining of Frequent Closed Sequences", in Proc. 2004 Int. Conf. on Data Engineering (ICDE'04), Boston, MA, March 2004.
21. J. Han, J. Pei, and X. Yan, "Sequential Pattern Mining by Pattern-Growth: Principles and Extensions," in W. W. Chu and T. Y. Lin (eds.), Recent Advances in Data Mining and Granular Computing (Mathematical Aspects of Knowledge Discovery), Springer Verlag, 2004.
23. J. Han, J. Pei, and X. Yan, "Sequential Pattern Mining by Pattern-Growth: Principles and Extensions," in W. W. Chu and T. Y. Lin (eds.), Recent Advances in Data Mining and Granular Computing (Mathematical Aspects of Knowledge Discovery), Springer Verlag, 2004.

2003

2. Y.-K. Lee, W.-Y. Kim, Y. D. Cai, and J. Han, "CoMine: Efficient Mining of Correlated Patterns", Proc. 2003 Int. Conf. on Data Mining (ICDM'03), Melbourne, FL, Nov. 2003.
3. C. Aggarwal, J. Han, J. Wang, and P. S. Yu, "A Framework for Clustering Evolving Data Streams", Proc. 2003 Int. Conf. on Very Large Data Bases (VLDB'03), Berlin, Germany, Sept. 2003.
4. J. Han, R. B. Altman, V. Kumar, H. Mannila and D. Pregibon, "Emerging Scientific Applications in Data Mining", Communications of ACM, 45(8):54-58, 2002.
5. D. Xin, J. Han, X. Li, and B. W. Wah, "Star-Cubing: Computing Iceberg Cubes by Top-Down and Bottom-Up Integration", in Proc. 2003 Int. Conf. on Very Large Data Bases (VLDB'03), Berlin, Germany, Sept. 2003.
6. X. Yan and J. Han, "CloseGraph: Mining Closed Frequent Graph Patterns", in Proc. 2003 ACM SIGKDD Int.Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.
7. H. Yu, J. Yang, and J. Han, "Classifying Large Data Sets Using SVM with Hierarchical Clusters", in Proc. 2003 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.
8. J. Wang, J. Han, and J. Pei, "CLOSE+: Searching for the Best Strategies for Mining Frequent Closed Itemsets", in Proc. 2003 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.
9. H. Wang, W. Fan, P. S. Yu, and J. Han, "Mining Concept-Drifting Data Streams using Ensemble Classifiers", in Proc. 2003 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.
10. C. Giannella, J. Han, Pei, X. Yan and P.S. Yu, "Mining Frequent Patterns in Data Streams at Multiple Time Granularities", H. Kargupta, A. Joshi, K. Sivakumar, and Y. Yesha (eds.), Next Generation Data Mining, 2003.
11. X. Yin and J. Han, "CPAR: Classification based on Predictive Association Rules", in Proc. 2003 SIAM Int.Conf. on Data Mining (SDM'03), San Francisco, CA, May 2003.
12. X. Yan, J. Han, and R. Afshar, "CloSpan: Mining Closed Sequential Patterns in Large Datasets", in Proc. 2003 SIAM Int.Conf. on Data Mining (SDM'03), San Francisco, CA, May 2003.
14. K. Wang, Y. Jiang, J. X. Yu, G. Dong, and J. Han, "Pushing Aggregate Constraints by Divide-and-Approximate", The IEEE International Conference on Data Engineering, 2003, Bangalore,India, Slides

2002

1. Jiawei Han, Jianyong Wang, Ying Lu, and Peter Tzvetkov, "Mining Top-K Frequent Closed Patterns without Minimum Support", in Proc. 2002 Int. Conf. on Data Mining (ICDM'02), Maebashi, Japan, Dec. 2002.
2. Jian Pei, Guozhu Dong, Wei Zou, and Jiawei Han, "On Computing Condensed Frequent Pattern Bases", in Proc. 2002 Int. Conf. on Data Mining (ICDM'02), Maebashi, Japan, Dec. 2002.
3. Xifeng Yan and Jiawei Han, "gSpan: Graph-Based Substructure Pattern Mining", in Proc. 2002 Int. Conf. on Data Mining (ICDM'02), Maebashi, Japan, Dec. 2002. (10-Year Highest Impact Paper Award)
4. Hwanjo Yu, Kevin C. C. Chang, and Jiawei Han, "Heterogeneous Learner for Web Page Classification", in Proc. 2002 Int. Conf. on Data Mining (ICDM'02), Maebashi, Japan, Dec. 2002.
5. Jiawei Han, and Kevin C.-C. Chang, "Data Mining for Web Intelligence", Computer, Nov. 2002.
6. Jian Pei, Jiawei Han, and Wei Wang, "Mining Sequential Patterns with Constraints in Large Databases", in Proc. 2002 Int. Conf. on Information and Knowledge Management (CIKM'02), Washington, D.C., Nov. 2001.
7. Yixin Chen, Guozhu Dong, Jiawei Han, Benjamin W. Wah, and Jianyong Wang, "Multi-Dimensional Regression Analysis of Time-Series Data Streams", in Proc. 2002 Int. Conf. on Very Large Data Bases (VLDB'02), Hong Kong, China, Aug. 2002.
8. Laks V. S. Lakshmanan, Jian Pei, and Jiawei Han, "Quotient Cube: How to Summarize the Semantics of a Data Cube", in Proc. 2002 Int. Conf. on Very Large Data Bases (VLDB'02), Hong Kong, China, Aug. 2002.
9. Hwanjo Yu, Jiawei Han, and Kevin C.-C. Chang, "PEBL: Positive Example Based Learning for Web Page Classification Using SVM", in Proc. 2002 Int. Conf. on Knowledge Discovery in Databases (KDD'02), Edmonton, Canada, July 2002.
2001

1. W. Li, J. Han, and J. Pei, "CMAR: Accurate and Efficient Classification Based on Multiple Class-Association Rules," in Proc. 2001 Int. Conf. on Data Mining (ICDM'01), San Jose, CA, Nov. 2001.

2. J. Pei, J. Han, H. Lu, S. Nishio, S. Tang, and D. Yang, "H-Mine: Hyper-Structure Mining of Frequent Patterns in Large Databases", in Proc. 2001 Int. Conf. on Data Mining (ICDM’01), San Jose, CA, Nov. 2001.

3. H. Pinto, J. Han, J. Pei, K. Wang, Q. Chen, and U. Dayal, "Multi-Dimensional Sequential Pattern Mining", in Proc. 2001 Int. Conf. on Information and Knowledge Management (CIKM’01), Atlanta, GA, Nov. 2001.


5. G. Dong, J. Han, J. Lam, J. Pei, and K. Wang, "Mining Multi-Dimensional Constrained Gradients in Data Cubes", in Proc. 2001 Int. Conf. on Very Large Data Bases (VLDB’01), Rome, Italy, Sept. 2001.

6. S. H. S. Chee, J. Han, and K. Wang, "RecTree: An Efficient Collaborative Filtering Method", in Proc. 2001 Int. Conf. on Data Warehouse and Knowledge Discovery (DaWaK’01), Munich, Germany, Sept. 2001.

7. W. Jin, K.H. Tung and J. Han, "Mining Top-n Local Outliers in Large Databases", in Proc. 2001 Int. Conf. on Knowledge Discovery in Databases (KDD’01), San Jose, California, Aug. 2001.

8. J. Han, A. K. H. Tung, and J. Pei, "Fault-Tolerant Frequent Pattern Mining: Problems and Challenges", in Proc. 2001 ACM-SIGMOD Int. Workshop on Research Issues on Data Mining and Knowledge Discovery (DMKD’01), Santa Barbara, CA, May 2001.

9. J. Han, J. Pei, G. Dong, and K. Wang, "Efficient Computation of Iceberg Cubes with Complex Measures", in Proc. 2001 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD’01), Santa Barbara, CA, May 2001.

10. J. Han, H. Jamil, Y. Lu, L. Chen, Y. Liao, and J. Pei, "DNA-Miner: A System Prototype for Mining DNA Sequences", in Proc. 2001 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD’01), Santa Barbara, CA, May 2001 (system demonstration).

11. J. Pei, J. Han, H. Pinto, Q. Chen, U. Dayal, and M.-C. Hsu, "PrefixSpan: Mining Sequential Patterns Efficiently by Prefix-Projected Pattern Growth", in Proc. 2001 Int. Conf. on Data Engineering (ICDE’01), Heidelberg, Germany, April 2001.

12. A. K. H. Tung, J. Hou, and J. Han, "Spatial Clustering in the Presence of Obstacles", in Proc. 2001 Int. Conf. on Data Engineering (ICDE’01), Heidelberg, Germany, April 2001.

13. J. Pei, J. Han, and L. V. S. Lakshmanan, "Mining Frequent Itemsets with Convertible Constraints", in Proc. 2001 Int. Conf. on Data Engineering (ICDE’01), Heidelberg, Germany, April 2001.

14. A. K. H. Tung, J. Han, L. V. S. Lakshmanan, and R. T. Ng, "Constraint-Based Clustering in Large Databases", in Proc. 2001 Int. Conf. on Database Theory (ICDT’01), London, U.K., Jan. 2001.

2000

1. J. Han and J. Pei "Mining Frequent Patterns by Pattern-Growth: Methodology and Implications", ACM SIGKDD Explorations (Special Issue on Scaleable Data Mining Algorithms), 2(2), December 2000.

2. N. Stefanovic, J. Han, and K. Koperski, "Object-Based Selective Materialization for Efficient Implementation of Spatial Data Cubes", IEEE Transactions on Knowledge and Data Engineering, 12(6): 938-958, 2000.


4. K. Wang, Y. He and J. Han, "Mining Frequent Itemsets Using Support Constraints", in Proc. 2000 Int. Conf. on Very Large Data Bases (VLDB’00), Cairo, Egypt, Sept. 2000.

5. E. D. Kim, J. M. W. Lam, and J. Han, "AIM: Approximate Intelligent Matching for Time Series Data", 2000 Int. Conf. on Data Warehousing and Knowledge Discovery (DaWaK’00), Greenwich, U.K., Sept. 2000.

6. J. Han, J. Pei, B. Mortazavi-Asl, Q. Chen, U. Dayal, M.-C. Hsu, "FreeSpan: Frequent Pattern-Projected Sequential Pattern Mining", in Proc. 2000 Int. Conf. on Knowledge Discovery and Data Mining (KDD’00), Boston, MA, August 2000.

7. J. Pei and J. Han "Can We Push More Constraints into Frequent Pattern Mining?", in Proc. 2000 Int. Conf. on Knowledge Discovery and Data Mining (KDD’00), Boston, MA, August 2000.

8. J. Pei, J. Han, and R. Mao, "CLOSEST: An Efficient Algorithm for Mining Frequent Closed Itemsets (PDF)", in Proc. 2000 ACM-SIGMOD Int. Workshop on Data Mining and Knowledge Discovery (DMKD’00), Dallas, TX, May 2000.

9. J. Han, J. Pei, and Y. Yin, "Mining Frequent Patterns without Candidate Generation (PDF)", in Proc. 2000 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD’00), Dallas, TX, May 2000.
11. J. Pei, J. Han, B. Mortazavi-Asl, and H. Zhu "Mining Access Patterns Efficiently from Web Logs (PDF)", in Proc. 2000 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD’00), Kyoto, Japan, April 2000. (10-Year Most Influential Paper Award)

12. A. K. H. Tung, J. Hou, and J. Han, "COE:Clustering with Obstacles Entities, A Preliminary Study (PDF)", in Proc. 2000 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD’00), Kyoto, Japan, April 2000.

13. O. R. Zaïane, J. Han, and H. Zhu, "Mining Recurrent Items in Multimedia with Progressive Resolution Refinement (PDF)", in Proc. 2000 Int. Conf. on Data Engineering (ICDE’00), SanDiego, CA, March 2000.

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