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, Tianxi 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, Ruiillang Lyu, Xiang Ren, Michelle Vanni, Brian Saddler, 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, Yuhao 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)

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, Jinfeng 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, Qian Yuan, Honglei Zhuang, Lance M. Kaplan, Shaoqwen 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, Xiaoiee Yue, 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, "PENER: 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, Zhaoran 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 Norick, 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, Wenqi 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
18. Carl Yang, Mengxiong Liu, Frank He, Xikun Zhang, Jian Peng, and Jiawei Han, "Similarity Modeling on Heterogeneous Networks via AutoPath Matching", 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, Yinyin 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, August 2018.

21. Jingbo Shang, Chao Zhang, Jiamei 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, Jiamei Shen, Xuan Wang, Xiaotao Gu, Lance Kaplan, Timothy Harratty 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, August 2018.

23. Jiamei Shen*, Jinfeng Xiao*, Yu Zhang, Carl Yang, Jiamei Shen, Jingbo Shang, Saurabh Sinha, Peipei Ping, Richard Weinshilboum, Zhiyong Lu and Jiawei Han, "TruePIE: Discovering Reliable Patterns in 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, Jiamei Shen, Keqian Li, Warren Greiff, Michelle Vanni, Jiawei Han and Xifeng Yan, "FTS: Faceted Taxonomy Construction and Search for Scientific Publications", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), (demo paper), London, UK, August 2018.

25. Carl Yang, Xiaolin Shi, Jie Luo and Jiawei Han, "I Know 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.

26. Chao Zhang, Fangbo Tao, Xiushi Chen, Jiamei 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.

27. Qi Li, Meng Jiang, Xikun Zhang, Meng Qu, Timothy Hanratty, Jing Gao and Jiawei Han, "True PIE: 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.

28. Jiamei 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.

29. 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.

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

31. Jiamei Shen, Zeqiu Wu, Jiaxiang Ren, Jiamei Shen, Xiaotao Gu and Jiawei Han, "End-to-End Reinforcement Learning for AutoTaxonomy Induction", in Proc. of 2018 Annual Meeting of the Association for Computational Linguistics (ACL’18), Melbourne, Australia, July 2018.

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

33. Ahmed El-Kishky, Frank Xu, Aston Zhang, Stephen Macke and Jiawei Han, "Entropy-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.

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

35. 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.

36. Qi Zhu, Xiang Ren, Jingbo Shang, Yu Zhang, Frank F. Xu and Jiawei Han, "Open Information Extraction with Global Structure Constraints", (poster paper), Proc. of 2018 Int. Conf. on World-Wide Web (WWW’18), Lyon, France, Apr. 2018 (received WWW’18 best poster award honorable mention).

37. Carl Yang, Chao Zhang, Jiawei Han, Xuewen Chen, Jieping Ye, "Did You Enjoy the Ride: Understanding Passenger Experience via Heterogeneous Network Embedding", Proc. of 2018, IEEE International Conference on Data Engineering (ICDE’18), Paris, France, April 2018.

38. Liuyun Liu, Jingbo Shang, Frank Xu, Xiang Ren, Huan Gui, 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.

39. Chao Zhang, Mengxiong Liu, Zhengchao Liu, Carl Yang, Luming Zhang, Jiawei Han, "Spatiotemporal 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.

40. Wanzheng Zhu, Chao Zhang, Shuchao 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.

41. 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.

42. 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.

43. 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.

2017

1. Adit Krishnan, Aravind Sankar, Shi Zhi, Jiawei Han, "Unsupervised Concept Categorization and Extraction from Scientific Document Titles", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM’17), Singapore, Nov. 2017.
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, Yichen Sun, Jiajui Li, Chi Zhang, "ClaimVerify: A Real-time Claim Verification 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, Zhengchao Liu, Chao Zhang, Keyang Zhang, Quan Yuan, Tim Hanratty and Jiawei Han, "Urbaniety: 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 Heterogeneous Information Networks", 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. Liyuan 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 2017 Conf. on Empirical Methods in Natural Language Processing (EMNLP'17), Copenhagen, Denmark, Sept. 2017.

11. Meng Jiang, Jingbo Shang, Taylor Cassidy, Xiang Ren, Lance Kaplan, Timothy Hanratty and Jiawei Han, "MetaPAD: Meta Pattern Discovery from Massive Text Corpora", in Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'17), Halifax, Nova Scotia, Canada, Aug. 2017.

12. Yu Shi, Po-Wei Chan, Honglei Zhuang, Huan Gui and Jiawei Han, "PreP: Path-Based Relevance from a Probabilistic Perspective in Heterogeneous Information Networks", in Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'17), Halifax, Nova Scotia, Canada, Aug. 2017.

13. Meng Jiang, 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.

14. Carl Yang, Lanxiao Bai, Chao Zhang, Quan Yuan and Jiawei Han, "Bridging Collaborative Filtering and Semi-Supervised Learning: A Neural Approach for POI recommendation", in Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'17), Halifax, Nova Scotia, Canada, Aug. 2017.

15. Chao Zhang, Liyuan Liu, Dongming Lei, Quan Yuan, Honglei Zhuang, Tim Hanratty and Jiawei Han, "TrioVecEvent: Embedding-Based Online Local Event Detection in Geo-Tagged Tweet Streams", in Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'17), Halifax, Nova Scotia, Canada, Aug. 2017.

16. Meng Jiang, Honglei Zhuang, Xiang Ren and 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.

17. Xiuli Ma, Guangyu 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.

18. Xiang Ren, Jiaming Shen, Meng Qu, Xuan Wang, Zeqiu Wu, Qi Zhu, Meng Jiang, Fangbo Tao, Saurabh Sinha, David Liem, Peipei Ping, Richard Weishilboum and Jiawei Han, "LifeNet: A Structured Network-Based Knowledge Exploration and Analytics System for Life Sciences", Proc. of 2017 Annual Meeting of the Association for Computational Linguistics (ACL’17), (system demo), Vancouver, Canada, July 2017.


20. Xiang Ren, Meng Jiang, Jingbo Shang and Jiawei Han, "Building Structured Databases of Factual Knowledge from Massive Text Corpora" (conference tutorial), Proc. of 2017 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’17), June 2017.


22. Xiang Ren, Zeqiu Wu, Wenzhi He, Meng Qu, Clare Voss, Heng Ji, Tarek Abdelzaher and Jiawei Han, "CoType: Joint Extraction of Typed Entities and Relations with Knowledge Bases", in Proc. of 2017 World-Wide Web Conf. (WWW’17), Perth, Australia, Apr. 2017.

23. Chao Zhang, Keyang Zhang, Quan Yuan, Haozuo Peng, Yu Zheng, Tim Hanratty, Shaowen Wang and Jiawei Han, "Regions, Periods, Activities: Uncovering Urban Dynamics via Cross-Modal Representation Learning", in Proc. of 2017 World-Wide Web Conf. (WWW’17), Perth, Australia, Apr. 2017.

24. Xiang Ren, Meng Jiang, Jingbo Shang and Jiawei Han, "Constructing Structured Information Networks from Massive Text Corpora" (conference tutorial), Proc. of 2017 World-Wide Web Conf. (WWW’17), Perth, Australia, Apr. 2017.

25. Chao Zhang, Quan Yuan, and Jiawei Han, "Bringing Semantics to Spatiotemporal Data Mining: Challenges, Methods, and Applications" (conference tutorial), Proc. of 2017 IEEE Int. Conf on Data Engineering (ICDE’17), San Diego, California, Apr. 2017.

26. Xiang Ren, Yuanhua Lv, Kuansan Wang and Jiawei Han, "Comparative Document Analysis for Large Text Corpora", in Proc. of 2017 ACM Int. Conf. on Web Search and Data Mining (WSDM’17), Cambridge UK, Feb. 2017.

27. Quan Yuan, Wei Zhang, Chao Zhang, Xinhe Geng, Gao Cong and Jiawei Han, "Periodic Region Detection for Mobility Modeling of Social Media Users", in Proc. of 2017 ACM Int. Conf. on Web Search and Data Mining (WSDM’17), Cambridge UK, Feb. 2017.

28. Wenjun Jiang, Chenglin Miao, Lu Su, Qi Li, Shaohan Hu, Shiguang Wang, Jing Gao, Hengchung Liu, Tarek F. Abdelzaher, Jiawei Han, Xue Liu, Yan Gao, and Lance Kaplan, "Towards Quality Aware Information Integration in Distributed Sensing Systems", in IEEE Transactions on Parallel and Distributed Systems, 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, "EKNOT: 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", Geoinformatics, 2016.


38. Jinleng 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. 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 Random Walk 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, "FailCrowd: 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, Cangzhou Yuan, "TOPTRAC: 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, Charu Aggarwal, Lance Kaplan, and Jiawei Han, "GIIN: 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 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 III, Baltimore, Maryland, April 2015.

28. Wei Feng, Chao Zhang, Wei Zhang, Jiawei Han, Jianyong Wang, Charu 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, Charu 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’15), 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, and Jiawei Han, "ePeriodicity: Mining Event Periodicity fromIncomplete 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, "Mining Trajectory Data and Geotagged Data in Social Media for Road Map Inference", Transactions in GIS (T. GIS) 19(1):1-18, 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, Charu 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, Tarek Abdellazeh, 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.


10. Jiawei Han, "Construction, Exploration, and Mining of Semi-Structured, Heterogeneous Information Networks", Tutorial at the 2014 Military Sensory Symposium (MSS) National Symp. on Sensor Data Fusion (NSSDF), Springfield, VA, Oct. 2014.

11. Yingzhen Yang, Zhengyang Wang, Jianchao Yi, 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.

12. Jiawei Han, "Distributed, Structured, and Mining of Semi-Structured, Heterogeneous Information Networks", in Proc. of 2014 European Conf. on Machine Learning and Principles and Practices of Knowledge Discovery in Databases (ECMLPKDD'14), Nancy, France, Sept. 2014.

13. Chao Zhang, Jiawei Han, Lidan Shou, Jain 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 Linguistics (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 Lu, Q. Xueqin Liu, Yanglei Song, Jiawei Han and Jiajun 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 Li, 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, "News NetExplorer: 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..


29. Marina Danilevsky, Chi Wang, Nihit 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 Freecbase Knowledge", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM’14), New York City, NY, Feb. 2014.
2013

37. Xiang Ren, Yujing Wang, Xiao Yu, 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. Aggarawal and Chandan K. Reddy (eds.), Data Clustering: Algorithms and Applications, pp. 61-86, CRC Press, 2014.

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

1. Hyungsu 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, Jialu 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 Deenann 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, Yanen Li, Chengxiang Zhai, and Jiawei Han, "Content Coverage Maximization on Word Networks for Hierarchical Topic Summarization", in Proc. of 2013 Int. Conf. on Information and Knowledge Management (CIKM’13), San Francisco, CA, Oct. 2013, pp. 249-258. (ominated as one of the best paper award candidates)

5. Paul Bennett, C. Lee Giles, Alan Y. Halevy, Jiawei Han, Marti A. Hearst. Jure Leskovec; Channeling the deluge: research challenges for big data and information systems. in Proc. of 2013 Int. Conf. on Information and Knowledge Management (CIKM’13), San Francisco, CA, Oct. 2013, pp. 2537-2558

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, Jialu Liu, 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, Jialu Liu, 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, Jialu Liu, Xifeng Yan, Hasan Cam, and Jiawei Han, "On Detecting Association-Based Clique Outliers in Heterogeneous Information Networks", in Proc. of 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. Jialu Liu, Kin 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. Tanja Gupta, Prasanna Giridhar, Lu-An Tang, Jun 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 Semantics in Heterogeneous Information Networks (MDS’13), Chicago, IL, Aug. 2013.

16. Quanquan Gu, Charu Aggarwal, Jialu 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, Thirvikrama 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", (system demo) in Proc. of 2013 ACM SIGKDD Int. Conf. on Knowledge 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, Ruchaa Kanade, AnneKao, Qi Li, Yanen 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. Jialu 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 Mappings 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, Ruchu Kanade, Yizhou Sun, Chi Wang, Lidan Wang, Tim Weninger, "Research-Inspire: 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 World 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. 378-386. This paper was also ranked 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. 2013 Int. Conf. on Artificial Intelligence and Statistics (AISTAT'13), Scottsdale, AZ, Apr. 2013, pp. 298-306.


40. Nan Li, Ziyu Guan, Liye Ren, Jian Wu, Jiawei Han, and Xifeng Yan, "gloveberg: 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 Int. Conf. on Web Search and Data Mining (WSDM'13), Rome, Italy, Feb. 2013. pp. 779-780.

42. Ling Chen, Xue Li, and Jiawei Han, "Graph Clustering with Multi-View Clustering via Joint Non-negative Matrix Factorization", in Proc. of 2013 Australian Database Conf. (ADC'13), Adelaide, South Australia, Jan. 2013.

43. Xin Jin, Jiebo Luo, Jie Yu, Gang Wang, Dhiraj 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): 383-401 (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, Philip 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, Xiaolei He, Deng Cai, Jiawei Han, "Parallel Field Ranking", ACM Transactions on Knowledge Discovery from Data (TKDD), 7(3): 1-15 (2013)

49. Mohammad M. Masud, Qing Chen, Niki Pissis, Yash Khandelwal, Xueyi Huang, Dian Yu, Heng Ji, Yizhou Sun, Jiawei Han, and He Li, "Detecting 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): 1841-1856 (2013)

51. Wei Gao, Guohong Cao, Tom La Porta, Jiawei Han: On Exploiting TransientSocial 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, Philip 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. Hyunsoo 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, Latifur 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. 1259-1266

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, "MiTextCube: MicroTextCluster Cube for Online Analysis of Text Cells and Its Applications" . Statistical Analysis and DataMining,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-Topic Hierarchies from Document Graphs", in Proc. of 2012 Int. Conf. on Information and Knowledge Management (CIKM’12), Maui, Hawaii, Oct. 2012.

13. Xiaojun Brodley, Branimir Noirik, Tiancheng 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 10th Annual Meeting of American Society for Information Science & Technology (ASIS&T’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. Yizhou Sun, 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 10th Int. Workshop on Quality in Databases, in conjunction with VLDB 2012 (QDB’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, Sangkyum Kim, Tim Weninger, and Jiawei Han, "Mining Flipping Correlations from Transactional Databases", in Proc. 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.
26. Ming Ji, Binbin Lin, Xiaofei He, Deng Cai, Jiawei Han, "Parallel Field Ranking", in Proc. of 2012 ACM SIGKDDInt. Conf. on Knowledge Discovery and Data Mining (KDD'12), Beijing, China, Aug. 2012 (KDD'12 Best Paper Award Candidate, Best Poster Award, invited to the special issue of ACM Transactions on KDD)

27. Zhenhui Li, Jingjing Wang, and Jiawei Han, "Mining Event Periodicity from Incomplete Observations", in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining(KDD'12), Beijing, China, Aug. 2012

28. Yizhou Sun, Brandon Norick, Jiawei Han, Xifeng Yan, Philip S. Yu, and Xiao Yu, "Integrating Meta-Path Selection with User-Guided Object Clustering in Heterogeneous Information Networks", in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'12), Beijing, China, Aug. 2012 (KDD’12 Best Student Paper Award, invited to the special issue of ACM Transactions on KDD)

29. Xingjie Liu, QI He, Yuanyuan Tian, Wang-Chien Lee, John McPherson, Jiawei Han, "Event-based Social Networks: Linking the Online and Offline Social Worlds", in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'12), Beijing, China, Aug. 2012

30. Xiao Yu, Yizhou Sun, Peixiang Zhao, Jiawei Han, "Query-Driven Discovery of Semantically Similar Substructures in Heterogeneous Networks" (System Demo), in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’12), Beijing, China, Aug. 2012

31. Jiawei Han, "Mining Heterogeneous Information Networks: The Next Frontier" (keynote speech), in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’12), Beijing, China, Aug. 2012 (slides)

32. Jiawei Han, "Data Mining with Social and Trajectory Data: Urban Computing in the Big Data Age", CCF-ADL invited tutorial, Beijing, Aug. 2012.

33. Yizhou Sun and Jiawei Han, Mining Heterogeneous Information Networks: Principles and Methodologies, Morgan & Claypool Publishers, July 2012 (Series: Synthesis Lectures on Data Mining and Knowledge Discovery)

34. Ming Ji, Tianbao Yang, Binbin Lin, Rong Jin, and Jiawei Han, "A Simple Algorithm for Semi-supervised Learning with Improved Generalization Error Bound", in Proc. of 2012 Int. Conf. on Machine Learning (ICML’12), Edinburgh, Scotland, June 2012.

35. Jingjing Wang and Bhaskar Prabhala, "Periodicity Based Next Place Prediction", in Proc. of Workshop on Mobile Data Challenge by Nokia, Newcastle, UK, June 2012

36. Hongbo Deng, Jiawei Han, Michael R. Lyu and Irwin King, "Modeling and Exploiting Heterogeneous Bibliographic Networks for Expertise Ranking", in Proc. 2012 ACM/IEEE Joint Conf. on Digital Libraries (JCDL’12), Washington, D.C., June 2012. (Vannevar Bush Best Paper Award)

37. Jianbin Huang, Hell Sun, Qinbao Song, Hongbo Deng, and Jiawei Han, "Revealing Density-Based Clustering Structure from the Connected Tree of a Network", accepted by IEEE Transactions on Knowledge and Data Engineering, Apr. 2012.

38. Lu-An Tang, Xiao Yu, Sangkyum Kim, Quanquan Gu, Jiawei Han, Alice Leung, Thomas La Porta, "Trustworthiness Analysis of Sensor Data in Cyber-Physical Systems", accepted by Special Issue on Data Warehousing and Knowledge Discovery from Sensors and Streams, Journal of Computer and System Sciences (JCSS), April 2012.

39. Lu-An Tang, Xiao Yu, Sangkyum Kim, Jiawei Han, Wen-Chih Peng, Yizhou Sun, Alice Leung, Thomas La Porta, "Multidimensional Sensor Data Analysis in Cyber-Physical Systems: An Atypical Cube Approach", International Journal of Distributed Sensor Networks, Vol. 12, 2012 (19 pages).

40. Tim Weninger, Chengxiang Zhai and Jiawei Han, "Building Enriched Web Page Representations Using Link Paths", in Proc. 2012 ACM Conf. on Hypertext and Social Media (HT’12), Milwaukee, WI, June 2012.

41. Mohammad M. Masud, Qin Chen, Latifur Khan, Charu C. Aggarwal, Jing Gao, Jiawei Han, Ashok Srivastava and Nikunj C. Oza, "Classification and Adaptive Novel Class Detection of Feature-Evolving Data Streams", IEEE Transactions on Knowledge and Data Engineering, accepted Apr. 2012.

42. Yizhou Sun, Hongbo Deng and Jiawei Han, "Probabilistic Models for Text Mining", book chapter in Charu C. Aggarwal and Chengxiang Zhai (eds.), Mining Text Data, pp. 259-295, Kluwer Academic Publishers, 2012.

43. Heng Ji, Hongbo Deng, and Jiawei Han, "Uncertainty Reduction for Web-Scale Knowledge Discovery and Information Extraction", The Proceedings of the IEEE, 2012, accepted in March 2012.

44. Bolin Ding, Haixun Wang, Ruoming Jin, Jiawei Han, and Zhongyuan Wang, "Optimizing Index for Taxonomy Keyword Search", in Proc. of 2012 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’12), Scottsdale, AZ, May 2012.


46. Liangliang Cao, John Smith, Zhen Wen, Zhijun Yin, Xin Jin, and Jiawei Han, "BlueFinder: Estimate Where a Beach Photo Was Taken" (poster paper), in Proc. of 2012 Int. Conf. on Word Wide Web (WWW’12), Lyon, France, Apr. 2012.

47. Chi Wang, Wei Chen, and Yajun Wang, "Scalable Influence Maximization for Independent Cascade Model in Large-Scale Social Networks", Data Mining and Knowledge Discovery, Volume 25, Number 3 (2012), 545-576, DOI: 10.1007/s10618-012-0262-1.

48. Lu-An Tang, Quanquan Gu, Xiao Yu, Jiawei Han, Thomas La Porta, Alice Leung, Tarek Abdelzaher, and Lance Kaplan, "IntruMine: Mining Intruders in Untrustworthy Data of Cyber-Physical Systems", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.

49. Xiao Yu, Quanquan Gu, Mianwei Zhou, and Jiawei Han, "Citation Prediction in Heterogeneous Bibliographic Networks", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.

50. Manish Gupta, Peixiang Zhao, and Jiawei Han, "Evaluating Event Credibility on Twitter", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.

51. Chi Wang, Jiawei Han, Qi Li, Xiang Li, Wen-Pin Lin, and Heng Ji, "Learning Hierarchical Relationships among Partially Ordered Objects with Heterogeneous Attributes and Links", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.

52. Zhijun Yin, Liangliang Cao, Quanquan Gu, and Jiawei Han, "A Probabilistic Model of Community-Based Latent Topic Analysis", ACM Transactions on Intelligent Systems and Technology (ACM TIST), 3(4), 2012, 63, doi: 10.1145/2373542.2373548.

53. Quanquan Gu, Marina Danilevsky, Zhenhui Li, and Jiawei Han, "Locality Preserving Feature Learning", in Proc. 2012 Int. Conf. on Artificial Intelligence and Statistics (AISTAT’12), LaPalma, Canary Islands, April 2012.

54. Ming Ji and Jiawei Han, "A Variance Minimization Criterion to Active Learning on Graphs", in Proc. 2012 Int. Conf. on Artificial Intelligence and Statistics (AISTAT’12), LaPalma, Canary Islands, April 2012.

55. Manish Gupta and Jiawei Han, "Applications of Pattern Discovery Using Sequential Data Mining", Chapter 1 in Pradeep Kumar, P. Radha Krishna, and S. Bapi Raju (eds.), Pattern Discovery Using Sequence Data Mining: Applications and Studies, IGI Global, 2012, pp. 1-23.

56. Manish Gupta and Jiawei Han, "Approaches for Pattern Discovery Using Sequential Data Mining", Chapter 8 in Pradeep Kumar, P. Radha Krishna, and S. Bapi Raju (eds.), Pattern Discovery Using Sequence Data Mining: Applications and Studies, IGI Global, 2012, pp. 137-154.
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: Keyword Search 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. Hyungsoo 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 Int. Conf. on Data Mining (ICDM'11), Vancouver, Canada, Dec. 2011.

4. Cindy Xide Lin, Qiaozhu Ma, Jiawei Han, "LPTA: A Probabilistic Model for Latent Periodic Topic Analysis", in Proc. 2011 IEEE Int. Conf. on Data Mining (ICDM'11), Vancouver, Canada, Dec. 2011.

5. Zhijun Yin, Liangliang Cao, Jiawei Han, Chengxiang Zhai, and Thomas Huang, "LPTA: A Probabilistic Model for Latent Periodic Topic Analysis", in Proc. 2011 IEEE Int. Conf. on Data Mining (ICDM'11), Vancouver, Canada, Dec. 2011.

6. Jing Gao, Wei Fan, Deepak Turaga, Srinivasan Parthasarathy, and Jiawei Han, "A Spectral Framework for Detecting Inconsistency across Multi-Species Historical Relationships", in Proc. 2011 IEEE Int. Conf. on Data Mining (ICDM'11), Vancouver, Canada, Dec. 2011.

7. Mohammad Masud, Tahseen Al-Khateeb, Latifur Khan, and Jiawei Han, "Detecting Recurring and Novel Classes in Concept-Drifting Data Streams", in Proc. 2011 IEEE Int. Conf. on Data Mining (ICDM'11), Vancouver, Canada, Dec. 2011.

8. Lu Su, Yang Yong, Bolin Ding, Jing Gao, Tarek F. Abdelzaher, and Jiawei Han, "Hierarchical Aggregative Classification with Limited Supervision for Data Reduction in Wireless Sensor Networks", in Proc. 2011 ACM Int. Conf. on Embedded Networked Sensor Systems (SenSys'11), Seattle, WA, Nov. 2011.

9. Duo Zhang, Chengxiang Zhai, and Jiawei Han, "MiTexCube: MicroTextCluster Cube for Online Analysis of Text Cells", in Proc. 2011 NASA Conf. on Intelligent Data Understanding(CIDU'11), Mountain View, CA, Oct. 2011.

10. Hao Li, Heng Ji, Hongbo Deng, Jiawei Han, "Exploiting Background Information Networks to Enhance Bilingual Event Extraction Through Topic Modeling", in Proc. of International Conference on Advances in Information Mining and Management (IMMM2011), Barcelona, Spain, Oct. 2011.

11. Zhenhui Li, Jiawei Han, Ming Ji, Lu-An Tang, Yintao Yu, Bolin Ding, Jae-Gil Lee, and Roland Kays, "MoveMine: Mining Moving Object Data for Discovery of Animal Movement Patterns", ACM Transactions on Intelligent Systems and Technology (ACM TIST), 2(4):37, 2011.

12. Quanquan Gu and Jiawei Han, "Towards Feature Selection in Network", in Proc. 2011 Int. Conf. on Information and Knowledge Management (CIKM'11), Glasgow, UK, Oct. 2011.

13. Quanquan Gu, Zhenhui Li, and Jiawei Han, "Correlated Multi-Label Feature Selection", in Proc. 2011 Int. Conf. on Information and Knowledge Management (CIKM'11), Glasgow, UK, Oct. 2011.

14. Bo Zhao, Cindy Xide Lin, Bolin Ding, Jiawei Han, "TEXplorer: Keyword based Object Ranking and Exploration in Multidimensional Text Databases", in Proc. 2011 Int. Conf. on Information and Knowledge Management (CIKM'11), Glasgow, UK, Oct. 2011.

15. Peixiang Zhao, Dimitrios Lymberopoulos, Klaus Berberich, Christian Konig, Jie Liu, "Location-aware Click Prediction in Mobile Local Search", in Proc. 2011 Int. Conf. on Information and Knowledge Management (CIKM'11), Glasgow, UK, Oct. 2011.

16. Yunliang Jiang, Cindy Xide Lin, Bruce Schatz, "Multi-class classification for online personal healthcare messages", in Proc. of 2011 Int. workshop on Web Science and Information Management in the Medical Web (MedEX 2011), co-located with 2011 Int. Conf. on Information and Knowledge Management (CIKM'11), Glasgow, UK, Oct. 2011.


18. Quanquan Gu, Zhenhui Li, and Jiawei Han, "Linear Discriminant Dimensionality Reduction", in Proc. 2011 European Conf. on Machine Learning and Principles of Knowledge Discovery in Databases (ECMLPKDD'11), Athens, Greece, Sept. 2011.

19. Sangkyum Kim, Marina Barsky, and Jiawei Han, "Efficient Mining of Top Correlated Patterns Based on Null-Invariant Measures", in Proc. 2011 European Conf. on Machine Learning and Principles of Knowledge Discovery in Databases (ECMLPKDD’11), Athens, Greece, Sept. 2011.

20. Lu-An Tang, Xiao Yu, Chenxiang Zhai, and Jiawei Han, "Efficient Mining of Top Correlated Patterns Based on Null-Invariant Measures", in Proc. of 2011 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’11), San Diego, Aug. 2011.

21. Ming Ji, Jiawei Han, and Marina Danilevsky, "Ranking-Based Classification of Heterogeneous Information Networks", in Proc. of 2011 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’11), San Diego, Aug. 2011.
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 (SNAKD’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, Jing 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 Haixuan 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, 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. Lixin Chen, Xinyuan Cheng, Xiang Lu, David S. Premaratne, Li Li, David W. Cheung, 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), (systemdemo), 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. 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, Dhiraj 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 Halpem 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) [slides]

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, Jiemeng 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 Social Network 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, Kyungsul Kim, Tim Weningger, 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, ChengXiang Zhong, 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 Meheyd Masud, Clay Woolam, Jing Gao, Latifur Khan, Jiawei Han,Kevin W. Hamlen, and Nikunj C. Oza, "Facing the Reality of Data Stream Classification: Coping with Scarity 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 Hailpern, Jiawei Han, Ming Ji, Thomas J. Johnston, Surya Kallumadi, Hyungsul Kim, Zhijin Li, David McCloskey, Yizhou Sun, Nathan E. TeGrotenhuis, 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 demo paper), 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 (ICCP’S11), Chicago, IL, Apr. 2011

63. Jiawei Han, "Exploring the Power of the Heterogeneous Information Networks in Data Mining", in Proc. of 2011 SIAM Conf. on Data Mining (SDM’11), Phoenix, AZ, Apr. 2011.

64. J. Hailpern, 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. Jing Gao, Wei Fan, Deepak S. Turaga, Olivier Verscheure, Xiaojiao Meng, Lu Su, Jiawei Han, "Consensus Extraction from Heterogeneous Detectors to Improve Performance over Network Traffic Anomaly Detection", in Proc. of 2011 IEEE INFOCOM Mini-Conf. (INFOCOM-Mini’11), Shanghai, China, Apr. 2011.

69. Zhijin Yin, Liangliang Cao, Jiawei Han, Chengxiang Zhai, and Thomas Huang, "Geographical Topic Discovery and Comparison", in Proc. of 2011 Int. World Wide Web Conf. (WWW’11), Hyderabad, India, Mar. 2011 (Full paper).

70. Tim Weninger, Fabio Fumarola, Cindy Xide Lin, Rick Barber, Jiawei Han, and Donato Malerba, "Growing Parallel Paths for Entity-Page Discovery", in Proc. of 2011 Int. World Wide Web Conf. (WWW’11), Hyderabad, India, Mar. 2011 (Poster paper).

71. Fabio Fumarola, Rick Barber, Tim Weninger, Donato Malerba, and Jiawei Han, "HyLiEn: A Hybrid Approach to General List Extraction on the Web", in Proc. of 2011 Int. World Wide Web Conf. (WWW’11), Hyderabad, India, Mar. 2011 (Poster paper).

72. Manish Gupta, Yizhou Sun, and Jiawei Han, "Trust Analysis with Clustering", in Proc. of 2011 Int. World Wide Web Conf. (WWW’11), Hyderabad, India, March 2011 (Poster paper)

73. Fabio Fumarola, Tim Weninger, Rick Barber, Donato Malerba, and Jiawei Han, "Extracting General Lists from Web Documents: A Hybrid Approach", Int. Conf. on Industrial, Eng. and Other Applications of Applied Intel. Sys. (IEA/AIE’11), Syracuse, New York, USA, Mar. 2011.

74. Bolin Ding and Amd Christian Konig, "Fast Set Intersection in Memory", accepted by PVLDB, 2011.

75. 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.


77. Tim Weninger, Fabio Fumarola, Tim Weninger, Rick Barber, Donato Malerba, and Jiawei Han, "Visual Cube and On-Line Analytical Processing of Images", in Proc. of 2011 ACM/IEEE Int. Conf. on Cyber-Physical Systems (ICCP’S11), Mountain View, CA, Oct. 2010.

78. Lu-An Tang, Xiao Yu, Sangkyum Kim, Jiawei Han, Chih-Chieh Hung, and Wen-Chih Peng, "SHRINK: A Structural Clustering Algorithm for Detecting Hierarchical Communities in Networks", in Proc. of 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 2010.

79. Xin Jin, Jiawei Han, Liangliang Cao, Jiebo Luo, Bolin Ding, Cindy Xide Lin, "Visual Cube and On-Line Analytical Processing of Images", in Proc. 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 2010.

80. Lu Liu, Jie Tang, Jiawei Han, Meng Jiang, Shiqiang Yang, "Mining Topic-Level Influence in Heterogeneous Networks", Proc. 2010 ACM SIGMOD Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 2010.

81. Tim Weninger, Fabio Fumarola, Jiawei Han, Donato Malerba, "Mapping Web Pages to Database Records via Link Paths", in Proc. 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 2010.

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, Zhijin 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-Cliu: 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.


6. Lu-An Tang, Xiao Yu, Sangkyum Kim, Jiawei Han, Chih-Chieh Hung, and Wen-Chih Peng, "Tru-Alarm: Trustworthiness Analysis of Sensor Networks in Cyber-Physical Systems", in Proc. of 2010 Int. Conf. on Data Mining (ICDM’10), Sydney, Australia, Dec. 2010.

7. Bo Zhao, Cindy Xide Lin, Ashok N. Srivastava, Nikunj C. Oza, and Jiawei Han, "Correlated Topics in a Scalable Multidimensional Text Cube: Algorithms and Aviation Safety Case Study", (extend abstract and poster paper), in Proc. of 2010 NASA Conference on Intelligent Data Understanding (CIDU2010), Mountain View, CA, Oct. 2010.

8. Jianbin Huang, Heli Sun, Jiawei Han, Hongbo Deng, Yizhou Sun, and Yaguang Liu, "SHRINK: A Structural Clustering Algorithm for Detecting Hierarchical Communities in Networks", in Proc. of 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 2010.

9. Xin Jin, Jiawei Han, Liangliang Cao, Jiebo Luo, Bolin Ding, Cindy Xide Lin, "Visual Cube and On-Line Analytical Processing of Images", in Proc. 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 2010.

10. Lu Liu, Jie Tang, Jiawei Han, Meng Jiang, Shiqiang Yang, "Mining Topic-Level Influence in Heterogeneous Networks", Proc. 2010 ACM SIGMOD Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 2010.

11. Tim Weninger, Fabio Fumarola, Jiawei Han, Donato Malerba, "Mapping Web Pages to Database Records via Link Paths", in Proc. 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 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 Conceptual 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 Klubjan, 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, Yuguoh 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-Stage Density-based Clustering Algorithm for Dynamic Networks", in Proc. 12th Int. Conf. on Discovery Science (DS'09), Porto, Portugal, Oct. 2009.
8. Jianhui Han, "Mining Heterogeneous Information Networks: Hints by Exploring the Power of Links", in Proc. 12th Int. Conf. on Discovery Science (DS'09), Porto, Portugal, Oct. 2009. (invited talk)
9. Chandrasekar 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-based 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 Jiawei 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, Duo Zhang, and Bo Zhao, "INextCube: 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, SiuCheng 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, Qiaozhu Mei, and Jiawei Han, "Exploiting Social Tagging Graph for Web Object Classification", in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery as Data Mining (KDD'09), Paris, France, June 2009.
1. Chen Chen, Xifeng Yan, Feida Zhu, and Jiawei Han, "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, 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, Lalitfuran 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, Heiu 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. Jee-Gil 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, Xueqin 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 Graphs", 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.

2008

1. Chen Chen, Xifeng Yan, Feida Zhu, and Jiawei Han, "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, Lalitfuran 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, Heiu 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. Jee-Gil 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, Xueqin 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 Graphs", 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.
21. Wen-Jin, Anthony K.H. Tung, Martin Ester, and Jiawei Han, "On Efficient Processing of Subspace Skyline Queries on High Dimensional Data", in Proc. 2007 Int. Conf. on Scientific and Statistical Database Management (SSDBM'07), Banff, Canada, July 2007.

22. Deng Cai, Xiaofei He, Yuxiao Hu, Jiawei Han, and Thomas Huang, "Learning a Spatially Smooth Subspace for Face Recognition", in Proc. 2007 IEEE Conf. on Computer Vision and Pattern Recognition (CVPR'07), Minneapolis, MN, June 2007.

23. Jie-Gil Lee, Jiawei Han, and Kyu-Young Whang, "Trajectory Clustering: A Partition-and-Group Framework", in Proc. 2007 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'07), Beijing, China, June 2007.

24. Dong Xin, Jiawei Han, and Kevin C.-C. Chang, "Progressive and Selective Merge: Computing Top-K with Ad-hoc Ranking Functions", in Proc. 2007 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'07), Beijing, China, June 2007.

25. Feida Zhu, Xifeng Yan, Jiawei Han, and Philip S. Yu, "gPrune: A Constraint Pushing Framework for Graph Pattern Mining", in Proc. 2007 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKD'D07), Nanjing, China, May 2007. (Best Student Paper Award)

26. Jing Gao, Wei Fan, and Jiawei Han, "A General Framework for Mining Concept-Drifting Data Streams with Skewed Distributions", in Proc. 2007 SIAM Int. Conf. on Data Mining (SDM'07), Minneapolis, MN, April 2007.

27. Xiaolei Li, Jiawei Han, Sangkyum Kim, and Hector Gonzalez, "ROAM: Rule- and Motif-Based Anomaly Detection in Massive Moving Object Data Sets", in Proc. 2007 SIAM Int. Conf. on Data Mining (SDM'07), Minneapolis, MN, April 2007. (One of “Best of SDM’07”)

28. Hong Cheng, Xifeng Yan, Jiawei Han, and Chih-Wei Hsu, "Discriminative Frequent Pattern Analysis for Effective Classification", in Proc. 2007 Int. Conf. on Data Engineering (ICDE'07), Istanbul, Turkey, April 2007.

29. Feida Zhu, Xifeng Yan, Jiawei Han, Philip S. Yu, and Hong Cheng, "Mining Colossal Frequent Patterns by Core Pattern Fusion", in Proc. 2007 Int. Conf. on Data Engineering (ICDE'07), Istanbul, Turkey, April 2007. (Best Student Paper Award)

30. Hector Gonzalez, Jiawei Han, and Xuehua Shen, "Cost-conscious Cleaning of Massive RFID Data Sets", in Proc. 2007 Int. Conf. on Data Engineering (ICDE'07), Istanbul, Turkey, April 2007.

31. Xiaoyin Yin, Jiawei Han, and Philip S. Yu, "Object Distinction: Distinguishing Objects with Identical Names by Link Analysis", in Proc. 2007 Int. Conf. on Data Engineering (ICDE'07), Istanbul, Turkey, April 2007.

32. Wen Jin, Martin Ester, Zengjian Hu, and Jiawei Han, "The Multi-Relational Skyline Operator", in Proc. 2007 Int. Conf. on Data Engineering (ICDE'07), Istanbul, Turkey, April 2007.

33. Deng Cai, Xiaofei He, Kun Zhou, Jiawei Han and Hujun Bao, "Locality Sensitive Discriminant Analysis", in Proc. 2007 Joint Conf. on Artificial Intelligence (IJCAI'07), Hyderabad, India, Jan. 2007.

34. Xiaoyin Yin, Jiawei Han, and Philip S. Yu, "CrossClus: User-Guided Multi-Relational Clustering", Data Mining and Knowledge Discovery, 16(1), 2007. 10.1007/s10618-007-0072-z, SpringerLink Date: July 05, 2007.

35. Jianyong Wang, Jiawei Han, and Chun Li, "Frequent Closed Sequence Mining without Candidate Maintenance", IEEE Transactions on Knowledge and Data Engineering, 19(8), 2007.

36. Chulyun Kim, Sangkyum Kim, Russell Dorer, Dan Xie, Jiawei Han, and Sheng Zhong, "TagSmart: Analysis and Visualization for Yeast Mutant Fitness Data Measured by Tag Microarrays", BMC Bioinformatics, 8:128, April 2007. (http://www.biomedcentral.com/1471-2105/8/128)

37. Jian Pei, Jiawei Han, and Wei Wang, "Constraint-based sequential pattern mining: the pattern-growth methods", Journal of Intelligent Information Systems, 28(2):133-160, 2007.

38. Jiawei Han, Hong Cheng, Dong Xin, and Xifeng Yan, "Frequent Pattern Mining: Current Status and Future Directions", Data Mining and Knowledge Discovery, 15(1): 55-86, 2007. (Online version published on January 27, 2007, DOI 10.1007/s10618-006-0059-1 SpringerLink.

39. Dong Xin, Jiawei Han, Xifeng Yan and Hong Cheng, "On Compressing Frequent Patterns", Knowledge and Data Engineering, (Special issue on Intelligent Data Mining), 60(1): 5-29, 2007.

40. Dong Xin, Jiawei Han, Xiaolei Li, Zheng Shao, and Benjamin W. Wah, "Computing Iceberg Cubes by Top-Down and Bottom-Up Integration: The StarCubing Approach", IEEE Transactions on Knowledge and Data Engineering, 19(1): 111-126, 2007.

2006

1. Chao Liu, Zeng Lian, and Jiawei Han, "How Bayesians Debug?", in Proc. 2006 Int. Conf. on Data Mining (ICDM'06), Hong Kong, China, Dec. 2006.

2. Hong Cheng, Philip S. Yu, and Jiawei Han, "AC-Close: Efficiently Mining Approximate Closed Itemsets by CorePattern Recovery", in Proc. 2006 Int. Conf. on Data Mining (ICDM'06), Hong Kong, China, Dec. 2006.

3. Chao Liu and Jiawei Han, "Failure Proximity: A Fault Localization-Based Approach", in Proc. 14th ACM SIGSOFT Symposium on the Foundations of Software Engineering (FSE'06), Portland, OR, Nov. 2006.

4. Hector Gonzalez, Jiawei Han, and Xiaolei Li, "Mining Compressed Commodity Workflows From Massive RFID Data Sets", in Proc. 2006 Int. Conf. on Information and Knowledge Management (CIKM'06), Arlington, VA, Nov. 2006.

5. Xiaoyin Yin, Jiawei Han, and Philip Yu, "LinkClus: Efficient Clustering via Heterogeneous Semantic Links", in Proc. 2006 Int. Conf. on Very Large Data Bases (VLDB'06), Seoul, Korea, Sept. 2006.

6. Hector Gonzalez, Jiawei Han, and Xiaolei Li, "FlowCube: Constructing RFID FlowCubes for Multi-Dimensional Analysis of Commodity Flows", in Proc. 2006 Int. Conf. on Very Large Data Bases (VLDB'06), Seoul, Korea, Sept. 2006.

7. Dong Xin, Chen Chen, and Jiawei Han, "Towards Robust Indexing for Ranked Queries", in Proc. 2006 Int. Conf. on Very Large Data Bases (VLDB'06), Seoul, Korea, Sept. 2006.

8. Dong Xin, Jiawei Han, Hong Cheng, and Xiaolei Li, "Answering Top-k Queries with Multi-Dimensional Selections: The Ranking Cube Approach", in Proc. 2006 Int. Conf. on Very Large Data Bases (VLDB'06), Seoul, Korea, Sept. 2006.

9. Dong Xin, Hong Cheng, Xifeng Yan, and Jiawei Han, "Extracting Redundancy-Aware Top-K Patterns", in Proc. 2006 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'06), Philadelphia, PA, Aug. 2006.

10. Qiaozhu Mei, Dong Xin, Hong Cheng, Jiawei Han, and ChengXiang Zhai, "Generating Semantic Annotations for FrequentPatterns with Context Analysis", in Proc. 2006 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'06), Philadelphia, PA, Aug. 2006. (Best Student Paper Runner-Up Award)

11. Chao Liu, Chen Chen, Jiawei Han, and Philip Yu, "GPLAG: Detection of Software Plagiarism by Procedure Dependency Graph Analysis", in Proc. 2006 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'06), Philadelphia, PA, Aug. 2006.

12. Dong Xin, Xuehua Shen, Qiaozhu Mei, and Jiawei Han, "Discovering Interesting Patterns Through User's Interactive Feedback", in Proc. 2006 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'06), Philadelphia, PA, Aug. 2006.

13. Dong Cai, Xiaolei He and Jiawei Han, "Tensor Space Model for Document Analysis", in Proc. 2006 Int. ACM SIGIR Conf. on Research & Development on Information Retrieval (SIGIR’06), Seattle, WA, Aug. 2006.
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 Lu, Jiawei Han, and Jun He, "Error-Adaptive and Time-Aware Maintenance of Frequency Counts 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 (ISSI'06), San Diego, CA, May 2006.

18. Wen Jin, Anthony K. H. Tung, 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, April2006.

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. (Best Student Paper Award)

23. Hongyan Liu, 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 LosslessCompression 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(6): 764-769, 2006.

29. Xiaoxin Yin, Jiawei Han, Jing 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 KnowledgeDiscovery 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. Xiaoqin 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. J. Han, Jiawei Han, An Efficient Multi-relational Naive Bayesian Classifier Based on Semantic Relationship Graphs", in Proc. 2005 ACM-SIGKDD Workshop on Multi-Relational Data Mining (KDD/MDRM’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. Bandyopadhyay 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. Xin, J. Han, X. Yan and H. Cheng, "Mining Compressed Frequent-Pattern Sets", in Proc. 2005 Int. Conf. on Very Large Data Bases (VLDB’05), Trondheim, Norway, Aug. 2005.

12. X. Yan, 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.

19. X. Yan, P. S. Yu, and J. Han, “Substructure Similarity Search in Graph Databases”, in Proc. 2005 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD'05), Baltimore, Maryland, June 2005.

20. C. Liu, X. Yan, H. Yu, J. Han, and P. S. Yu, “Mining Behavior Graphs for Backtrace of Noncrashing Bugs”, in Proc. 2005 SIAM Int. Conf. on Data Mining (SDM'05), Newport Beach, CA, April 2005.

21. H. Cheng, X. Yan, and J. Han, “SeqIndex: Indexing Sequences by Sequential Pattern Analysis”, in Proc. 2005 SIAM Int. Conf. on Data Mining (SDM'05), Newport Beach, CA, April 2005.

22. X. Li, J. Han, X. Yin, and D. Xin, “Mining Evolving Customer-Product Relationships in Multi-Dimensional Space”, in Proc. 2005 Int. Conf. on Data Engineering (ICDE'05), Tokyo, Japan, April 2005.

23. X. Yan, X. J. Zhou, J. Han, “Mining Closed Relational Graphs with Connectivity Constraints”, in Proc. 2005 Int. Conf. on Data Engineering (ICDE'05), Tokyo, Japan, April 2005.


26. Hwanju Yu, Jong Yang, Jiawei Han, and Xiaolei Li, “Making SVM Scalable to Large Data Sets Using Hierarchical Indexing”, Data Mining and Knowledge Discovery, 11(3): 295-321, 2005.

27. Jiawei Han, Yixin Chen, Guozhu Dong, Jian Pei, Benjamin W. Wah, Jianyong Wang, and Y. Dora Cai, “Stream Cube: An Architecture for Multi-Dimensional Analysis of Data Streams,” Distributed and Parallel Databases, 18(2): 173-197, 2005.

28. Xifeng Yan, Phillip Yu, and Jiawei Han, “Graph Indexing Based on Discriminative Frequent Structure Analysis”, ACM Transactions on Database Systems, 30(4): 960-993 2005.

29. Deng Cai, Xiaofei He and Jiawei Han, “Document Clustering Using Locality Preserving Indexing”, IEEE Transactions on Knowledge and Data Engineering, 17(12):1624-1637, 2005.

30. Charu Aggarwal, Jiawei Han, Jianyong Wang, and Philip S. Yu, “On Efficient Algorithms for High Dimensional Projected Clustering of Data Streams”, Data Mining and Knowledge Discovery, 10:251-272, 2005.

31. Petre Tzvetkov, Xifeng Yan, Jiawei Han, “TSP: Mining top-k closed sequential patterns”, Knowl. Inf. Syst., 7(4): 438-457, 2005.


34. Xiaofei He, Deng Cai, Hailong Liu, Jiawei Han, “Image clustering with tensor representation”, ACM Multimedia 2005:132-140

---

**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, J. Wang, and P. S. Yu, “A Framework for Projected Clustering of High Dimensional Data Streams”, in Proc. 2004 Int. Conf. on Very Large Data Bases (VLDB'04), Toronto, Canada, Aug. 2004.

3. X. Li, J. Han, and H. 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, J. 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, “IncsSpan: 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. Liu, 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.


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. X. 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.-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. Lam, J. Pei, K. Wang, and W. Zeng, “Mining Constrained Gradients in Multi-Dimensional Databases”, IEEE Transactions on Knowledge and Data Engineering, 16(6), 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, J. 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.

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.
10. J. Liu, Y. Pan, K. Wang, and J. Han, "Mining Frequent Item Sets by Opportunistic Projection", in Proc. 2002 Int. Conf. on Knowledge Discovery in Databases (KDD'02), Edmonton, Canada, July 2002.

11. J. Han, "How Can Data Mining Help Bio-data Analysis?", in Proc. 2002 Workshop on Data Mining in Bioinformatics (with SIGKDD'02 Conf.) (BIODDD'02), Edmonton, Canada, July 2002.

12. J. Pei and J. Han, "Constrained Frequent Pattern Mining: A Pattern-Growth View", ACM SIGKDD Explorations (Special Issue on Constrained Data Mining), 2(2), 2002.

13. J. Han, J. Wang, G. Dong, J. Pei, K. Wang, "CubeExplorer: Online Exploration of Data Cubes", in Proc. 2002 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD'02), Madison, WI, June 2002. (system demonstration).

14. J. Yang, P. Yu, W. Wang, and J. Han, "Mining Long Sequential Patterns in a Noisy Environment", in Proc. 2002 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD'02), Madison, WI, June 2002.

15. Y. Chen, G. Dong, J. Han, J. Pei, B. W. Wah, and J. Wang, "Online Analytical Processing Stream Data: Is It Feasible?", in Proc. 2002 ACM-SIGMOD Int. Workshop on Research Issues on Data Mining and Knowledge Discovery (DMKD'02), Madison, WI, June 2002.

16. K. Wang, S. Zhou, and J. Han, "Profit Mining: From Patterns to Actions", in Proc. 2002 Int. Conf. on Extending Data Base Technology (EDBT'02), Prague, Czech, March 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. Pei, A. K. H. Tung, and J. Han, "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, J. Pei, 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. Han, J. Pei, 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, "CLOSET: 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.

10. J. Pei, R. Mao, K. Hu, and H. Zhu, "Towards Data Mining Benchmarking: A Test Bed for Performance Study of Frequent Pattern Mining (PDF)", in Proc. 2000 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD'00), (demo paper), 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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