Research Publications - Data Mining Research Group at CS, UIUC

2019

1. Shuochoa Yao, Ailing Piao, Wenjun Jiang, Yiran Zhao, Huajie Shao, Shengzhong Liu, Dongxin Liu, Jinyang Li, Tianshi Wang, Shaohuan Hu, Lu Su, Jiawei Han and Tarek Abdelzaher, “STFNNets: 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 JIWEI HAN, “Integrating Local Context and Global Cohesiveness for Open Information Extraction”, in Proc. 2019 ACM Int. Conf. on Web Search and Data Mining (WSDM’19), Melbourne, Australia, Feb. 2019
6. Jiaming Shen, Ruiliang Lyu, Xiang Ren, Michelle Vanni, Brian Sadler, Jiawei Han, “Mining Entity Synonyms with Efficient Neural Set Generation”, in Proc. 2019 AAAI Conf. on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, Jan. 2019
7. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, “Weakly-Supervised Hierarchical Text Classification”, in Proc. 2019 AAAI Conf. on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, Jan. 2019
8. Xuan Wang, Yu Zhang, Xiang Ren, Yu Hao Zhang, Marina 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, Quan Yuan, Honglei Zhuang, Lance M. Kaplan, Shaowen Wang, Jiawei Han, “GeoBurst+: Effective and Real-Time Local Event Detection in Geo-Tagged Tweet Streams”, ACM Transactions on Intelligent Systems and Technology (TIST) 9 (3): 34:1-24 (2018)
6. Wei Shen, Jiawei Han, Jianyong Wang, Xiaojie Wang, Zhenglu Yang, “SHINE+: A General Framework for Domain-Specific Entity Linking with Heterogeneous Information Networks”, IEEE Transactions on Knowledge and Data Engineering, 30(2): 353-366 (2018)
7. Xuan Wang, Yu Zhang, Qi Li, Cathy Wu, and Jiawei Han, “PENNER: Pattern-enhanced Nested Named Entity Recognition in Biomedical Literature”, Proc. 2018 Int. Conf. on Bioinformatics and Biomedicine (BIBM’18), Madrid, Spain, Dec. 2018
8. Qi Li, Xuan Wang, Yu Zhang, Fei Ling, Cathy Wu, and Jiawei Han, “Pattern Discovery for Wide-Window Open Information Extraction in Biomedical Literature”, Proc. 2018 Int. Conf. on Bioinformatics and Biomedicine (BIBM’18), Madrid, Spain, Dec. 2018
9. Shi Zhi, Fan Yang, Zheyi Zhu, Qi Li, 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 Ngok, and Jiawei Han, “Active Learning on Heterogeneous Information Networks: A Multi-armed Bandit Approach”, in Proc 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, Lili Huang, Heng Ji, Chin-Yew Lin and Jiawei Han, “Open-Schema Event Profiling for Massive News Corpora”, in Proc. of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM’18), Turin, Italy, Oct. 2018
16. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, “Weakly-Supervised Neural Text Classification”, in Proc. of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM’18), Turin, Italy, Oct. 2018
17. Jingbo Shang, Jiaming Shen, Tianhang Sun, Xingbang Liu, Anja Gruenheid, Flip Korn, Adam Lelkes, Cong Yu and Jiawei Han, “Investigating Rumor News Using Agreement-Aware Search”, in Proc. of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM’18), Turin, Italy, Oct. 2018
18. Carl Yang, Mengxiong Liu, Frank He, Xikun Zhang, Jian Peng, and Jiawei Han, "Similarity Modeling on Heterogeneous Networks via Automatic Path Discovery", in Proc. of 2018 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD’18), Dublin, Ireland, Sept. 2018

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

20. Xuan Wang, Yu Zhang, Qi Li, 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, Jiaming Shen, Jiawei Han, "Towards Multidimensional Analysis of Text Corpora", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), (Conference Tutorial), London, UK, Aug. 2018

22. Jingbo Shang, Qi Zhu, Jiaming Shen, Xuan Wang, Xiaotao Gu, Lance Kaplan, Timothy 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. Jiaming Shen*, Jinfeng Xiao*, Yu Zhang, Carl Yang, Jingbo Shang, Jinda Han, Saurabh Sinha, Peipei Ping, Richard Weirshilboum, Zhiyong Lu and Jiawei Han, "End-to-End Reinforcement Learning for Scientific Literature", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), (demo paper), London, UK, August 2018

24. Hanwen Zha, Jiaming 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, Jiaming Shen, Meng Jiang, BrianSadler, 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 Harratty, Jing Gao and Jiawei Han, "TruePIE: Discovering Reliable Patterns in Pattern-Based Information Extraction", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, August 2018

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

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. Yuning Mao, Xiang Ren, Jiaming Shen, Jiawei Han, "SetSearch+: Entity-Set-Aware Search and Mining for Scientific Literature", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, August 2018

32. Yuning Mao, Xiang Ren, Jiaming Shen, Jiawei Han, "Entity Set Search of Scientific Literature: An Unsupervised Ranking Approach", in Proc. of 2018 ACM SIGIR Conf. on Research and Development in Information Retrieval (SIGIR’18), Ann Arbor, MI, July 2018

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," in 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", in Proc. of 2018, IEEE International Conference on Data Engineering (ICDE’18), Paris, France, April 2018

38. Liyuan 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, Cari 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 Zhe, Yichen Sun, Jiayi Liu, Chao Zhang and Jiawei Han, "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, "Urbanity: A System for Interactive Exploration of Urban Dynamics from Streaming Human Sensing Data" (system demo), in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), Singapore, Nov. 2017

7. Huan Gui, Jialu Liu, Fangbo Tao, Meng Jiang, Brandon Norick, Lance Kaplan and Jiawei Han, "Embedding Learning with Events 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

8. Jiaming Shen, Zeqiu Wu, Dongming Lei, Jingbo Shang, Xiang Ren, Jiawei Han, "SetExpans: 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. Liuyuan 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 Qu, Jian Tang, Jingbo Shang, Taylor Cassidy, Xiang Ren, Lance Kaplan, Timothy Hanratty and Jiawei Han, "MetaPAD: Meta Pattern Set Expansion on Knowledge Discovery in Databases (ECMLPKDD’17), Skopje, Macedonia, Sept. 2017

12. Yu Shi, Po-Wei Chan, Honglei Zhuang, Huan Gui and Jiawei Han, "PreP: Path-Based Reliability 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 Qu, Jian Tang, Jingbo Shang 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. Qiao Zhang, Liuyuan Liu,dongming Lei, Quan Yuan, Honglei Zhuang, Tim Hanratty and Jiawei Han, "TriVecEvent: 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. Chao Zhang, Keyang Zhang, Quan Yuan, Fangbo Tao, Luming Zhang, Tim Hanratty, Jiawei Han, "ReAct: Online Multimodal Embedding for Recency-Aware Spatiotemporal Activity Modeling", in Proc. of 2017 ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’17), Tokyo, Japan, Aug. 2017

17. Jingbo Shang, Xiang Ren, Meng Jiang, and Jiawei Han, "Mining Entity-Relation-Attribute Structures from Massive Text Data" (conference tutorial), Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’17), Halifax, Nova Scotia, Canada, Aug 2017.

18. Chao Zhang, Dongming Lei, Quan Yuan, Honglei Zhuang, Lance Kaplan, Shaowen Wang, 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

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

20. Xiang Ren, Jiaming Shen, Meng Qu, Xuan Wang, Zeqiu Wu, Qi Zhu, Meng Jiang, Fangbo Tao, Saurabh Sinha, David Liem, Peipei Ping, Richard Weishnibium 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

21. Lifu Huang, Jonathan May, Xiaoman Pan, Heng Ji, Xiang Ren, Jiawei Han, Lin Zhao, James A. Hendler, "Liberal Entity Extraction: Rapid Construction of Fine-Grained Entity Typing Databases", Big Data. 5(1):19-31, 2017

22. 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.


24. Xiang Ren, Zeqiu Wu, Wenqi 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.

25. Chao Zhang, Keyang Zhang, Quan Yuan, Haoruo 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.

26. 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.

27. 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.

28. 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.

29. 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 Conf. on Web Search and Data Mining (WSDM’17), Cambridge UK, Feb. 2017.

30. Wenjun Jiang, Chenglin Miao, Lu Su, Qi Li, Shaohan Hu, Shiguang Wang, Jing Gao, Hengchang 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.
1. Huan Gui, Jialu Liu, Fangbo Tao, Meng Jiang, Brandon T. Norick, and Jiawei Han, "Large-Scale Embedding Learning in Heterogeneous Event Data", in Proc. of 2016 Int. Conf. on Data Mining (ICDM'16), Barcelona, Spain, Dec. 2016.

2. Xiang Ren, Wenqi He, Meng Qu, Lifu Huang, Heng Ji, and Jiawei Han, "AFET: Automatic Fine-Grained Entity Typing by Hierarchical Partial-Label Embedding", in Proc. of 2016 Conf. on Empirical Methods in Natural Language Processing (EMNLP'16), Austin, TX, Nov. 2016.

3. Meng Jiang, Peng Cui, and Jiawei Han, "Data-Driven Behavioral Analytics: Observations, Representations and Models", in Proc. of 2016 ACM Conf. on Information and Knowledge Management (CIKM'16) (conference tutorial), Indianapolis, IN, Oct. 2016.

4. Tarique Siddiqui, Xiang Ren, Aditya Parameswaran and Jiawei Han, "FacetGist: Collective Extraction of Document Facets in Large Technical Corpora", in Proc. of 2016 ACM Conf. on Information and Knowledge Management (CIKM’16), Indianapolis, IN, Oct. 2016.

5. Hongkun Yu, Jingbo Shang, Meichun Hsu, Malú Castellanos and Jiawei Han, "Data-Driven Contextual Valence Shift Quantification for Multi-Theme Sentiment Analysis", in Proc. of 2016 ACM Int. Conf. on Information and Knowledge Management (CIKM’16), Indianapolis, IN, Oct. 2016.

6. Qian Cheng, Jingbo Shang, Joshua Juen, Jiawei Han and Bruce Schatz, "Mining Discriminative Patterns to Predict Health Status for Cardiopulmonary Patients", in Proc. of 2016 ACM Conf. on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB'16), Seattle, WA, Oct. 2016.

7. Fangbo Tao, Honglei Zhuang, Chi Wang Yu, Qi Wang, Taylor Cassidy, Lance Kaplan, Clare Voss, Jiawei Han, "Multi-Dimensional, Phrase-Based Summarization in Text Cubes", Data Eng. Bulletin 39(3), Sept. 2016, pp. 74-84.

8. Di Lu, Clare R. Voss, Fangbo Tao, Xiang Ren, Rachel Guan, Rostyslav Korolov, Tongtao Zhang, Dongang Wang, Hongzhi Li, Taylor Cassidy, Heng Ji, Shih-Fu Chang, Jiawei Han, William Wallace, James Hendler, Mei Si and Lance Kaplan, "Cross-media Event Extraction and Recommendation", in Proc. of 2016 Annual Conf. of the North American Chapter of the Association for Computational Linguistics (NAACL), 2016. [Demo System]

9. Huan Gui, Haishan Liu, Xiangrui Meng, Anmol Bhasin, Jiawei Han, "Downsize Management in Recommender Systems", in Proc. of 2016 IEEE/ACM Int. Conf. on Advances in Social Networks Analysis and Mining (ASONAM’16), San Francisco, CA, Aug. 2016

10. Rostyslav Korolov, Di Lu, Jingjing Wang, Guangyuo Zhou, Claire Bonial, Clare Voss, Lance Kaplan, William Wallace, Jiawei Han and Heng Ji, "On Predicting Social Unrest Using Social Media", in Proc. of 2016 IEEE/ACM Int. Conf. on Advances in Social Networks Analysis and Mining (ASONAM’16), San Francisco, CA, Aug. 2016.

11. Chao Zhang, Keyang Zhang Quan Yuan, Luming Zhang, Tim Hanratty, and Jiawei Han, "GMove: Group-Level Mobility Modeling Using Geo-Tagged Social Media", in Proc. of 2016 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’16), San Francisco, CA, Aug. 2016.

12. Meng Jiang, Christos Faloutsos, Jiawei Han, "CatchTartan: Representing and Summarizing Dynamic Multicontextual Behaviors", in Proc. of 2016 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’16), San Francisco, CA, Aug. 2016.

13. Xiang Ren, Wenqi He, Meng Qu, Clare R. Voss, Heng Ji, Jiawei Han, "Label Noise Reduction in Entity Typing by Heterogeneous Partial-Label Embedding", in Proc. of 2016 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’16), San Francisco, CA, Aug. 2016.

14. Mengting Wan, Xiangyu Chen, Lance Kaplan, Jiawei Han, Jing Gao, Bo Zhao, "From Truth Discovery to Trustworthy Opinion Discovery: An Uncertainty-Aware Quantitative Modeling Approach", in Proc. of 2016 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’16), San Francisco, CA, Aug. 2016.

15. Jing Gao, Qi Li, Bo Zhao, Wei Fan, and Jiawei Han, "Mining Reliable Information from Passively and Actively Crowdsourced Data" (conf. tutorial), in Proc. of 2016 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD’16), San Francisco, CA, Aug. 2016.

16. Xiang Ren, Wenqi He, Ahmed El-Kishky, Clare R. Voss, Heng Ji, Meng Qu and Jiawei Han, "Entity Typing: A Critical Step for Mining Structures from Massive Unstructured Text", in Proc. of 2016 Int. workshop on Mining and Learning with Graphs (MLG’16), colocated with KDD’16, San Francisco, CA, Aug. 14, 2016.

17. Chao Zhang, Guangyuo Zhou, Quan Yuan, Honglei Zhuang, Yu Zheng, Lance Kaplan, Shaowen Wang, Jiawei Han, "GeoBurst: Real-time Local Event Detection in Geo-tagged Tweet Stream", in Proc. of 2016 ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’16), Pisa, Italy, July 2016.

18. Jingjing Wang, Changsung Kang, Yi Chang and Jiawei Han, "Learning Hostname Preference to Enhance Search Relevance", in Proc. of 2016 Int. Joint Conf. on Artificial Intelligence (IJCAI'16), New York City, NY, July 2016.

19. Wei Zhang, Quan Yuan, Jiawei Han and Jianyong Wang, "Collaborative Multi-Level Embedding Learning from Reviews for Rating Prediction", in Proc. of 2016 Int. Joint Conf. on Artificial Intelligence (IJCAI’16), New York City, NY, July 2016.

20. Huan Gui, Jiawei Han, Quanquan Gu, "Towards Faster Rates and Oracle Property for Low-Rank Matrix Estimation", in Proc. of 2016 Int. Conf. on Machine Learning (ICML’16), New York City, NY, June 2016.

21. Xiang Ren, Ahmed El-Kishky, Heng Ji, and Jiawei Han, "Automatic Entity Recognition and Typing in Massive Text Data", (Conference Tutorial) 2016 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’16), San Francisco, CA, June 2016.

22. Jingbo Shang, Wenzhu Tong, Jian Peng, and Jiawei Han, "DPClass: An Effective but Concise Discriminative Patterns-Based Classification Framework", in Proc of 2016 SIAM Int. Conf. on Data Mining (SDM’16), Miami, FL, May 2016.

23. Jingbo Shang, Jian Peng, and Jiawei Han, "MACFP: Maximal Approximate Consecutive Frequent Pattern Mining under Edit Distance", in Proc of 2016 SIAM Int. Conf. on Data Mining (SDM’16), Miami, FL, May 2016.

24. Chenguang Wang, Yizhou Sun, Yanglei Song, Jiawei Han, Yangqiu Song, Lidan Wang, and Ming Zhang, "Querying Similar Relations in Schema-Rich Heterogeneous Information Networks", in Proc of 2016 SIAM Int. Conf. on Data Mining (SDM’16), Miami, FL, May 2016.

25. Lingxiao Wang, Xiang Ren, Quanquan Gu, "Precision Matrix Estimation in High Dimensional Gaussian Graphical Models with Faster Rates", Proc. of 2016 Int. Conf. on Artificial Intelligence and Statistics (AISTATS’16), Cadiz, Spain, May 9 - 11, 2016.

26. Xiang Ren, Ahmed El-Kishky, Chi Wang, and Jiawei Han, "Automatic Entity Recognition and Typing in Massive Text Corpora", (Conference tutorial), 2016 Int. World-Wide Web Conf. (WWW’16), Montreal, Canada, April 2016.

27. Jialu Liu, Xiang Ren, Jingbo Shang, Taylor Cassidy, Clare Voss and Jiawei Han, "Representing Documents via Latent Keyphrase Inference", in Proc. of 2016 Int. World-Wide Web Conf. (WWW’16), Montreal, Canada, April 2016.
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. Anton 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, Haoran 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", GeoInformatica, 2016.
38. Jinfeng Xiao, Sheng Wang, Jingbo Shang, Henery Lin, Doris Xin, Xiang Ren, Jiawei Han, and Jian Peng, "DWCox: A density-weighted Cox model for outlier-robust prediction of prostate cancer survival", F1000 Research, 2016.

2015

1. Jingjing Wang, Wenzhu Tong, Hongkun Yu, Min Li, Xiuli Ma, Haoyan Cai, Tim Hanratty, and Jiawei Han, "Mining Multi-Aspect Reflection of News Events in Twitter: Discovery, Linking and Presentation", in Proc. of 2015 IEEE Int. Conf. on Data Mining (ICDM'15), Atlantic City, NJ, Nov. 2015
2. Chenguang Wang, Yangqiu Song, Haoran 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 Qui, Jing Gao, Shi Zhi, Lu Su, Bo Zhao, Heng Ji, and Jiawei Han, "FaitCrowd: Fine Grained Truth Discovery for Crowdsourced Data Aggregation", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015
11. Chi Wang, Xueqing Liu, Yanglei Song, Jiawei Han, "Towards Interactive Construction of Topical Hierarchy: A Recursive Tensor Decomposition Approach", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015
12. Yaliang Li, Qi Li, Jing Gao, Lu Su, Bo Zhao, Wei Fan, and Jiawei Han, "On the Discovery of Evolving Truth", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015
13. Shi Zhi, Bo Zhao, Wenzhu Tong, Jing Gao, Dian Yu, Heng Ji, and Jiawei Han, "Modeling Truth Existence in Truth Discovery", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'15), Sydney, Australia, Aug. 2015
14. Younghoon Kim, Jiawei Han, Gangzhou Yuan, "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. 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, "GIn: A Clustering Model for Capturing Dual Heterogeneity in Networked Data", in Proc. of 2015 SIAM Int. Conf. on Data Mining (SDM’15), Vancouver, Canada, Apr. 2015 (selected as one of the best papers in the conference and invited to journal 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-x2015), 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 from Incomplete Observations", IEEE Transactions on Knowledge and Data Engineering (TKDE), 27(5):1219-1232, 2015.

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

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

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

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

38. Jun Li, Qiming Qin, Jiawei Han, Lu An Tang, Kin Hou Lei, "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 Outlier Conf. on 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 Abdelzaher, Jiawei Han, Yue Liu, Yan Gao and Lance Kaplan, "Generalized Decision Aggregation in Distributed Sensing Systems", in Proc. of IEEE Real-Time Systems Symposium (RTSS'14), Rome, Italy, Dec. 2014.

7. Huan Gui, Yizhou Sun, Jiawei Han, and George Brova, "Modeling Topic Diffusion in Multi-Relational Bibliographic Information Networks", in Proc. of 2014 ACM Int. Conf. on Information and Knowledge Management (CIKM'14), Shanghai, China, Nov. 2014.

8. Hongbo Deng, Yizhou Sun, Yi Chang, and Jiawei Han, "Probabilistic Models for Classification", in Charu C. Aggarwal (ed.), Data Classification: Algorithms and Applications, pp. 65-86, CRC Press, 2014.


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

11. Yingzhen Yang, Zhashiyang Wang, Jianchao Yang, Jiawei Han, and Thomas S.Huang, "Regularized "1-Graph for Data Clustering", in Proc. of 2014 British Machine Vision Conference (BMVC'14), Nottingham, UK, Sept. 2014.


13. Chao Zhang, Jiawei Han, Lidan Shou, Jiajun Lu, and Thomas La Porta, "Splitter: Mining Fine Grained Sequential Patterns in Semantic Trajectories", PVLDB 7(9): 769-780, 2014 (Also, in Proc. 2014 Int. Conf. on Very Large Data Bases (VLDB'14), Hongzhou, 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 Sift Filing Validation based on Multi-dimensional Truth-Finding with Multi-layer Linguistic Indicators", in Proc. of 2014 Int. Conf. on Computational Linguistics and Emerging Technologies (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, Xueqiu Liu, Yangfeng Song, Jiawei Han, "Scalable Moment-Based Learning for Topic Model", in Proc. 2014 ICML Workshop on Method of Moments and Spectral Learning (ICML-MMSL'14), Beijing, China, June 2014.

20. Hongbo Deng, Jiawei Han, Hao Li, Heng Ji, Hongning Wang, and Yue Lu, "Exploring and Inferring User-User Pseudo-Friendship for Sentiment Analysis with Heterogeneous Networks", accepted by Statistical Analysis and Data Mining, Feb. 2014.

21. Chi Liu, Q. Xueqiu Liu, Yangfeng Song, Jiawei Han, and Xiaofeng Wang, "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 Zhang, "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 Net Explorer: 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, "Mining Latent 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, Subhro Roy, Jason H. D. Cho, 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. Jingxiang 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. of 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 Freebase Knowledge", in Proc. of 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM'14), New York City, NY, Feb. 2014.
2013

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 Deanean 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, Xiang 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. (nominated 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 and small information systems, in Proc. of 2013 Int. Conf. on Information and Knowledge Management (CIKM'13), San Francisco, CA, Oct. 2013, pp. 2537-2538

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


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

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

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

11. Manish Gupta, Jing Gao, Xiaofeng 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, Xiaohao 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. Tanu Jain, Prasanna Grishar, 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 Data 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, Thirthrivarika 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. Chuan Qiao, C. Lee Giles, Ethan Zeldovich, Jiawei Han, and Xiaofeng Chen, "Mining the Evolution of Research Topics in Scientific Literature", in Proc. of 2013 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data 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; "AMEHYST: 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, Rucha 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.
2012

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

2. Hyungsu 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, Lafitur Khan, Charu Aggarwal, and Jiawei Han, "Recurring and Novel Class Detection using Class-Based Ensemble", in Proc. of 2012 IEEE Int. Conf. on Data Mining (ICDM'12), Brussels, Belgium, Dec. 2012.

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

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

7. Guangwen 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 2012 ASEE Int. Conf. on Social Informatics (SocialInformatics2012), Washington, D.C., Dec. 2012.

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

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

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

13. Xiaomin Zhang, Brani Norick, Tiancheng Ma, 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 15th 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. 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. 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.
2011

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

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

5. 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. Zhijun Yin, Liangliang Cao, Jiawei Han, Chengxiang Zhai, and Thomas Huang, "A Spectral Framework for Detecting Inconsistency across Multi-Source Relationship", in Proc. 2011 IEEE Int. Conf. on Data Mining (ICDM'11), Vancouver, Canada, Dec. 2011.

7. Mohammad Masud, Tahaee Al-Khateeb, Lalitfur Khan, Chauru Aggarwal, Jing Gao, 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, Yong Yang, Bolin Ding, Jing Gao, Tarek F. Abdelzaher, and Jiawei Han, "Hierarchical Aggregate 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 Foundation 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 and Practice of Knowledge Discovery in Databases (ECMLPKDD'11), Athens, Greece, Sept. 2011.

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

20. LikeMiner: A System for Mining the Power of 'Like' in Social Media Networks", 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 (SNAKDD'11), San Diego, CA, Aug. 2011.

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

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

28. Lu-An Tang, Yu Zheng, Xing Xie, and Jiawei Han, "Retrieving k-Nearest Neighboring Trajectories by a Set of Points 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 Haixun 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, Xinyang Cheng, Xiang Lu, David W. Cheung, Liang Li, 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 Fatemeh, Hieu Le, Charu Aggarwal, "On Bayesian Interpretation of Fact-finding in Information Networks", in Proc. of 2011 Int. Conf. on Information Fusion 2011 (Fusion’11), Chicago, IL, April 2011.

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

38. Quanquan Gu, Zhenhui Li, and Jiawei Han, "Generalized Fisher Score for 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, Diraj 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 Halpern 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 Finalist]

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

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

45. Xiao Yu, Ang Pan, Lu-An Tang, Zhenhui Li and Jiawei Han, "Geo-Friends Recommendation in GPS-based Cyber-Physical Social Network", in Proc. of 2011 Int. Conf. on Advances in 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, Kyungsil Kim, Tim Wengener, 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 Zhai, 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. of2011 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, Lalitfhr Khan, Jiawei Han, Kevin W. Hamlen, and尼克jun C. Oza, "Facing the Reality of Data Stream Classification: Coping with Scarcity of Labeled Data", Knowledge and Information Systems (KAIS), accepted, June 2011.

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

57. Peixiang Zhao, Xiaolei Li, Dong Xin, and Jiawei Han, "Graph Cube: On Warehousing and OLAP MultidimensionalNetworks", 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 Halpem, Jiawei Han, Ming Ji, Thomas J. Johnston, Surya Kallumadi, Hyunsgul 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. of2011 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’11), Athens, Greece, June 2011.


61. Latifur Khan, Wei Fan, Jiawei Han, Jing Gao, Mohammad Mehedy Masud, "Data Stream Mining: Challenges and Techniques", (tutorial).

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", inProc. of 2011 ACM/IEEE Int. Conf. on Cyber-Physical Systems (ICCPS’11), Chicago, IL, Apr. 2011

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

64. Xin Jin, 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. Hyunsgul 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 Pu, 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, Liu 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 Arnd Christian König, "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. Xin Jin, Sangkyum Kim, Jiawei Han, Liangliang Cao, and Zhijun Yin, "Efficient Clustering of Large Datasets Based on Activity Detection Mining", Statistical Analysis and Data Mining,4(1):11-29, 2011.

2010

1. Tim Weninger, Fabio Fumarola, Rick Barber, Jiawei Han, Donato Malerba, "Unexpected Results in Automatic List Extraction on the Web", SIGKDD Explorations, 12(2), Dec. 2010.

2. Manish Gupta, Rui Li, Zhijun Yin, and Jiawei Han, "Survey on Social Tagging Techniques", SIGKDDExplorations, 12(1):58-72, 2010.

3. Heili 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, Chau 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, Heili 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. of 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 CIKM’10 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. of 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 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. Jing Gao, Jiawei Han, "Mining Heterogeneous Information Networks: From Clusters of Objects 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-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, Duozhang Zhang, and Bo Zhao, "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 Matching 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. Tianyi Wu, Feng Li, Qiaozhu Mei, and Jiawei Han, "Exploiting Social Tagging Graph for Web Object Classification", in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'09), Paris, France, June 2009.
18. Jing Gao, Wei Fan, Yizhou Sun, and Jiawei Han, "Heterogeneous Source Consensus Learning via Decision Propagation and Negotiation", in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'09), Paris, France, June 2009.

19. Deng Cai, Xiaofei He, Xuanhui Wang, Hujun Bao, and Jiawei Han, "Locality Preserving Nonnegative Matrix Factorization", in Proc. 2009 Int. Joint Conf. on Arti_cial Intelligence(JCAI-09), Pasadena, CA, July 2009.

20. Mohammad Maifi Hasan Khan, Tarek Abdelzaher, Jiawei Han, and Hossein Ahmadi, "Finding Symbolic Bug Patterns in Sensor Networks", in Proc. 2009 IEEE Int. Conf. on Distributed Computing in Sensor Systems (DCOSS '09), Marina Del Rey, CA, June 2009.

21. Jing Gao, Guofei Jiang, Haifeng Chen, and Jiawei Han, "Modeling Probabilistic Measurement Correlations for Problem Determination in Large-Scale Distributed Systems", in Proc. 2009 Int. Conf. on Distributed Computing Systems (ICDCS'09), Montreal, Quebec, Canada, June 2009.

22. Mohammad M Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "A Multi-Partition Multi-Chunk Ensemble Technique to Classify Concept-Drifting Data Streams", in Proc. 2009 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD'09), Bangkok, Thailand, Apr. 2009.

23. Xin Jin, Sangkyum Kim, Jiawei Han, Liangliang Cao, and Zhijun Yin, "GAD: General Activity Detection for Fast Clustering on Large Data", in Proc. 2009 SIAM Int. Conf. on Data Mining (SDM'09), Sparks, NV, April 2009.

24. Marisa Thoma, Hong Cheng, Arthur Gretzel, Jiawei Han, Hans-Peter Kriegel, Alexander J. Smola, Le Song, Philip S. Yu, Xifeng Yan, and Karsten Borgwardt, "Near-Optimal Supervised Feature Selection among Frequent Subgraphs", in Proc. 2009 SIAM Int. Conf. on Data Mining (SDM'09), Sparks, NV, April 2009.

25. Duo Zhang, Chengxiang Zhai and Jiawei Han, "Topic Cube: Topic Modeling for OLAP on Multidimensional Text Databases", in Proc. 2009 SIAM Int. Conf. on Data Mining (SDM'09), Sparks, NV, April 2009.

26. Yizhou Sun, Jiawei Han, Peixiang Zhao, Zhijun Yin, Hong Cheng, Tianyi Wu, "RankClus: Integrating Clustering with Ranking for Heterogeneous Information Network Analysis", in Proc. 2009 Int. Conf. on Extending Data Base Technology (EDBT'09), Saint-Petersburg, Russia, Mar. 2009.

27. Jiawei Han, Xifeng Yan, and Philip S. Yu, "Scalable OLAP and Mining of Information Networks", 2009 Int. Conf. on Extending Data Base Technology (EDBT'09), Saint-Petersburg, Russia, Mar. 2009.

28. Bolin Ding, David Lo, Jiawei Han, and Siau-Cheng Koo, "Efficient Mining of Closed Repetitive Gapped Subsequences from a Sequence Database", in Proc. 2009 Int. Conf. on Data Engineering (ICDE'09), Shanghai, China, Mar. 2009.

29. Xiaolei Li, Zhenhui Li, Jiawei Han, and Jae-Gil Lee, "Temporal Outlier Detection in Vehicle Traffic Data", in Proc. 2009 Int. Conf. on Data Engineering (ICDE'09), Shanghai, China, Mar. 2009.

30. Jiawei Han and Jing Gao, "Research Challenges for Data Mining in Science and Engineering", in H. Kargupta, et al., (eds.), Next Generation of Data Mining, Chapman & Hall, 2009.


32. Chen Chen, Xifeng Yan, Feida Zhu, and Philip S. Yu, "Graph OLAP: A Multi-Dimensional Framework for Graph Data Analysis", accepted by Knowledge and Information Systems (KAIS), 2009.


2008

1. Chen Chen, Xifeng Yan, Feida Zhu, and Philip S. Yu, "Graph OLAP: Towards Online Analytical Processing on Graphs", in Proc. 2008 Int. Conf. on Data Mining (ICDM'08), Pisa, Italy, Dec. 2008.

2. Deng Cai, Xiaofei He, Xiaoyun Wu, and Jiawei Han, "Non-negative Matrix Factorization on Manifold", in Proc. 2008 Int. Conf. on Data Mining (ICDM'08), Pisa, Italy, Dec. 2008.

3. Cindy Xide Lin, Bolin Ding, Jiawei Han, Feida Zhu, and Bo Zhao, "Text Cube: Computing IR Measures for Multidimensional Text Database Analysis", in Proc. 2008 Int. Conf. on Data Mining (ICDM'08), Pisa, Italy, Dec. 2008.

4. Luiz Mendes, Bolin Ding, and Jiawei Han, "Stream Sequential Pattern Mining with Precise Error Bounds", in Proc. 2008 Int. Conf. on Data Mining (ICDM'08), Pisa, Italy, Dec. 2008.

5. Mohammad Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "A Practical Approach to Classifying Evolving Data Streams: Training with Limited Amount of Labeled Data", in Proc. 2008 Int. Conf. on Data Mining (ICDM'08), Pisa, Italy, Dec. 2008.

6. Jing Gao, Bolin Ding, Wei Fan, Jiawei Han, and Philip S. Yu, "Classifying Data Streams with Skewed Class Distribution and Concept Drifts", IEEE Internet Computing (Special Issue on Data Stream Management), 12(6): 37-49, 2008.

7. Mohammad Maifi Hasan Khan, Hieu Le, Hossein Ahmadi, Tarek Abdelzaher, and Jiawei Han, "DustMiner: Troubleshooting Interactive Complexity Bugs in Sensor Networks", in Proc. 2008 ACM Int. Conf. on Embedded Networked Sensor Systems (SenSys'08), Raleigh, NC, Nov. 2008.

8. Chen Chen, Cindy Xide Lin, Xifeng Yan, and Jiawei Han, "On Effective Presentation of Graph Patterns: A Structural Representative Approach", in Proc. 2008 ACM Conf. on Information and Knowledge Management (CIKM'08), Napa Valley, CA, Oct. 2008.

9. Deng Cai, Qiaozhu Mei, Jiawei Han, and ChengXiang Zhai, "Modeling Hidden Topics on Document Manifold", in Proc. 2008 ACM Conf. on Information and Knowledge Management (CIKM'08), Napa Valley, CA, Oct. 2008.

10. Jae-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 Trees", in Proc. 2008 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'08), Las Vegas, NV, Aug. 2008.

12. Jing Gao, Wei Fan, Jing Jiang, and Jiawei Han, "Knowledge Transfer via Multiple Model Local Structure Mapping", in Proc. 2008 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'08), Las Vegas, NV, Aug. 2008.

13. Bin Jiang, Jian Pei, Xuemin Lin, David W. Cheung, and Jiawei Han, "Mining Preferences from Superior and Inferior Examples", in Proc. 2008 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'08), Las Vegas, NV, Aug. 2008.

14. Deng Cai, Xiaofei He, and Jiawei Han, "Sparse Projections over Graph", in Proc. 2008 AAAI Conf. on Artificial Intelligence (AAAI-08), Chicago, Illinois, July 2008.

15. Sangkyum Kim, Jaebum Kim, Younhee Ko, Seung-won Kwang and Jiawei Han, "PerRank: Personalized Rank Retrieval with Categorical and Numerical Attributes", in Proc. 2008 Int. Conf. on Web-Age Information Management (WAIM'08), Zhangjiajie, China, July 2008.
16. Tianyi Wu, Dong Xin, and Jiawei Han, "ARCube: Supporting Ranking Aggregate Queries in Partially Materialized Data Cubes", Proc. 2008 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'08), Vancouver, BC, Canada, June 2008.

17. Xifeng Yan, Hong Cheng, Jiawei Han, and Philip S. Yu, "Mining Significant Graph Patterns by Scalable Leap Search", Proc. 2008 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'08), Vancouver, BC, Canada, June 2008.

18. Xiaolei Li, Jiawei Han, Zhijun Yin, Jae-Gil Lee, and Yizhou Sun, "Sampling Cube: A Framework for Statistical OLAP over Sampling Data", in Proc. 2008 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'08), Vancouver, BC, Canada, June 2008.

19. Yizhou Sun, Tianyi Wu, Hong Cheng, Jiawei Han, Xiaojun Yin, and Peixiang Zhao, "BibNetMiner: Mining Bibliographic Information Networks", (demo paper), in Proc. 2008 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'08), Vancouver, BC, Canada, June 2008.

20. Sangkyum Kim, Xin Jin and Jiawei Han, "SpaRClus: Spatial Relationship Pattern-Based Hierarchical Clustering", in Proc. 2008 SIAM Int. Conf. on Data Mining (SDM08), Atlanta, GA, April 2008.

21. Ding Yuan, Kyuhyung Lee, Hong Cheng, Gopal Krishna, Zhenmin Li, Xiao Ma, Yuanyuan Zhou and Jiawei Han, "ClSpan: Comprehensive Incremental Mining Algorithms of Closed Sequential Patterns for Multi-Versional Software Mining", in Proc. 2008 SIAM Int.Conf. on Data Mining (SDM08), Atlanta, GA, April 2008.

22. Deng Cai, Xiaolei He, and Jiawei Han, "Training Linear Discriminant Analysis in Linear Time", in Proc. 2008 Int. Conf. on Data Engineering (ICDE'08), Cancun, Mexico, April 2008.

23. Hong Cheng, Xifeng Yan, Jiawei Han, and Philip S. Yu, "Direct Discriminative Pattern Mining for Effective Classification", in Proc. 2008 Int. Conf. on Data Engineering (ICDE'08), Cancun, Mexico, April 2008.

24. Jae-Gil Lee, Jiawei Han, and Xiaolei Li, "Trajectory Outlier Detection: A Partition-and-Detect Framework", in Proc. 2008 Int. Conf. on Data Engineering (ICDE'08), Cancun, Mexico, April 2008.

25. Dong Xin and Jiawei Han, "P-Cube: Answering Preference Queries in Multi-Dimensional Space", in Proc. 2008 Int. Conf. on Data Engineering (ICDE'08), Cancun, Mexico, April 2008.

26. Xiaoxin Yin, Jiawei Han and Philip S. Yu, "Truth Discovery with Multiple Conflicting Information Providers on the Web", IEEE Transactions on Knowledge and Data Engineering, 20(6):796-808, 2008.

27. Xiaofei He, Deng Cai, Jiawei Han, "Learning a Maximum Margin Subspace for Image Retrieval", IEEE Transactions on Knowledge and Data Engineering, 20(2):189-201, 2008.

28. Deng Cai, Xiaofei He, Jiawei Han, "SRDA: An Efficient Algorithm for Large Scale Discriminant Analysis", IEEE Transactions on Knowledge and Data Engineering, 20(1):1-12, 2008.

29. Hong Cheng, Philip S. Yu, and Jiawei Han, "Approximate Frequent Itemset Mining In the Presence of Random Noise", O. Maimon and L. Rokach (eds.), Soft Computing for Knowledge Discovery and Data Mining, Springer, 2008, pp. 363-389.

2007

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

20. Deng Cai, Xiaofei He and Jiawei Han, "Isometric Projection", in Proc. 2007 AAAI Conf. on Artificial Intelligence (AAAI-07), Vancouver, B. C., Canada, July 2007.
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, XiaoHei 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. Jae-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 (PAKDD'07), 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, Sangkyun 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. 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. Xiaoxin 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. Xiaoxin 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. Jianyou 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, Sangkyun Kim, Russell Dorner, 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. Xiaoxin 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. Deng Cai, Xiaofei 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 Countsover Data Streams", in Proc. 2006 Int. Conf. on Web-Age Information Management (WAIM'06), Hong Kong, China, June, 2006.

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

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

18. Wen Jin, Anthony K. H. 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, Xifen Yan, and Jiawei Han, "Mining Control Flow Abnormality for Logic Error Isolation," in Proc. 2006 SIAM Int. Conf. on Data Mining (SDM'06), Bethesda, MD, April 2006.

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

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

23. Hongyan Liu, Jiawei Han, Dong Xin, and Zheng Shao, "Top-Down Mining of Interesting Patterns from Very HighDimensional 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. X. Yan, Feida Zhu, Jiawei Han, and Philip S. Yu, "Searching Substructures with Superimposed Distance", in Proc. 2006 Int. Conf. on Data Engineering (ICDE'06), Atlanta, Georgia, April 2006.


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

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

29. Xiaoxin Yin, Jiawei Han, 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 Knowledge Discovery in Databases (PKDD'05), Porto, Portugal, Oct., 2005.

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

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

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

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

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

7. J. Yang, X. Yan, J. Han, and W. Wang, "Discovering Evolutionary Classifier over High Speed Non-Static Stream", in S. 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.
18. H. Hu, X. Yan, Yu, J. Han and X. J. Zhou, "Mining Coherent Dense Subgraphs across Massive Biological Networks for Functional Discovery", in Proc. 2005 Int. Conf. on Intelligent Systems for Molecular Biology (ISMB 2005), Ann Arbor, MI, 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.


25. J. Yang, X. Yan, J. Han, and W. Wang, "Discovering Evolutionary Classifier over High Speed Non-static Stream," in S. Bandyopadhyay et al. (eds.), Advances in KnowledgeDiscovery from Complex Data, Springer Verlag, 2005.

26. Hwanju Yu, Jiong 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, Philip 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 inDatabases (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 VeryLarge Data Bases (VLDB’04), Tokyo, 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), Tokyo, 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, "IncSpan: Incremental Mining of Sequential Patterns in Large Database", in Proc. 2004 Int. Conf. on Knowledge Discovery and Data Mining (KDD’04), Seattle, WA, Aug. 2004.

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

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

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

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


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

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

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

14. 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. Lom, J. Pei, K. Wang, and W. Zou, "Mining Constrained Gradients in Multi-Dimensional Databases", IEEE Transactions on Knowledge and Data Engineering, 16(6), 2004.
2003

1. P. Tzvetkov, X. Yan, and J. Han, "TSP: Mining Top-K Closed Sequential Patterns", in Proc. 2003 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.

2. Y.-K. Lee, W.-Y. Kim, Y. D. Cai, and J. Han, "CoMine: Efficient Mining of Correlated Patterns", in Proc. 2003 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'03), Melbourne, FL, Nov. 2003.

3. C. Aggarwal, J. Han, J. Wang, and P. S. Yu, "A Framework for Clustering Evolving Data Streams", in Proc. 2003 ACM SIGKDD 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.

11. J. Han, J. Pei, and X. Yan, "COSP: Classification based on Predictive Association Rules", in Proc. 2003 SIAM Int.Conf. on Data Mining (SDM'03), San Francisco, CA, May 2003.

12. X. Yan, J. Han, and R. Afshar, "CloSpan: Mining Closed Sequential Patterns in Large Datasets", in Proc. 2003 SIAM Int.Conf. on Data Mining (SDM'03), San Francisco, CA, May 2003.


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

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

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

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

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

2000

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

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


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

5. E. D. Kim, J. M. W. Lam, and J. Han, "AIM: Approximate Intelligent Matching for Time Series Data", in Proc. 2000 Int. Conf. on Data Warehouses 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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