Research Publications - Data Mining Research Group at CS, UIUC

2018

1. 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
2. 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
3. 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
4. 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
5. 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
6. Fangbo Tao, Chao Zhang, Xiusi Chen, Meng Jiang, Tim Hanratty, Lance Kaplan, and Jiawei Han, "Doc2Cube: Automated Document Allocation to Text Cues via Dimension-Aware Joint Embedding", in Proc of 2018 IEEE Int. Conf. on Data Mining (ICDM'18), Singapore, Nov. 2018
7. Doris Xin, Ahmed El-Kishky, De Liao, Brandon Norick, and Jiawei Han, "Active Learning on Heterogeneous Information Networks: A Multi-armed Bandit Approach", in Proc of 2018 IEEE Int. Conf. on Data Mining (ICDM'18), Singapore, Nov. 2018
8. Xuan Wang, Yu Zhang, Xiang Ren, Yuhao Zhang, Marinka Zitnik, Jingbo Shang, Curtis Langlotz, and Jiawei Han, "Cross-type Biomedical Named Entity Recognition with Deep Multi-Task Learning", Bioinformatics (accepted), Oct. 2018
9. Jingbo Shang, Luyuan 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
10. Lijuan 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
11. Quan Yuan, Xiang Ren, Wenzhi He, Chao Zhang, Xinhe Geng, Liehu Huang, Heng Ji, Chin-Yew Lin and Jiawei Han, "Open-Schema Event Profiling for Domain Tables", in Proc of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM'18), Turin, Italy, Oct. 2018
12. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, "Weekly-Supervised Neural Text Classification", in Proc of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM'18), Turin, Italy, Oct. 2018
13. 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
14. 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
15. 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
16. 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 Int. Conf. on Bioinformatics, Computational Biology, and Health Informatics (ACMB’18), Washington, DC, August 2018
17. Jingbo Shang, Chao Zhang, Jiaming Shen, Jiawei Han, "Towards Multidimensional Analysis of Text Corpora", Proc of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), (Conference Tutorial), London, UK, Aug. 2018
18. 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
19. Jiaming Shen, Jinfeng Xiao, Yu Zhang, Carl Yang, Jingbo Shang, Jinda Han, Saurabh Sinha, Peipei Ping, Richard Weisniboum, Zhiyong Lu and Jiawei Han, "SetSearch+: Entity-Set-Aware Search and Mining for Scientific Literature", in Proc of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), (demo paper), London, UK, August 2018
20. Hanwen Zha, Jiaming Shen, Keqian Li, Warren Greiff, Michelle Vanni, Jiawei Han and Xileng 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
21. 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
22. Chao Zhang, Fangbo Tao, Xiusi Chen, Jiaming Shen, Meng Jiang, Brian Sadler, Michelle Vanni and Jiawei Han, "TaxoGen: Constructing Topical Concept Taxonomy by Adaptive Term Embedding and Clustering", in Proc of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, August 2018
23. Qi Li, Meng Jiang, Xiuwen Zhang, Meng Gu, Timothy Hanratty, 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
24. 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
12. Meng Jiang, Jingbo Shang, Taylor Cassidy, Xiang Ren, Lance Kaplan, Timothy Hanratty and Jiawei Han, "MetaPAD: Meta Patten Discovery from Massive Text Corpora", in Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’17), Halifax, Nova Scotia, Canada, Aug. 2017.

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

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

15. 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.

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

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

18. 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, August 2017.

19. 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.

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

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


23. 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.


25. 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.

26. Chao Zhang, Keyang Zhang, Quan Yuan, Haoru 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.

27. 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.

28. 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.

29. 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.

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

31. 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.

2016

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 Int. 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 Int. 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 Shifter 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. Meng Qu, 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, Claire R. Voss, Fangbo Tao, Xiang Ren, Rachel Guan, Rostyslav Korolov, Tongtang 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, Jingli Wang, Guangyu Zhou, Claire Bonial, Claire 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, Claire 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, Claire 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, Guangyu 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. Jiqing Wang, Changsong Kang, Yi Chang and Jiawei Han, “Learning Homepage 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 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. Qingxia Wang, Xiang Ren, Quanquan Gu, “Precision Matrix Estimation in High Dimensional Gaussian Graphical Models with Faster Rates”, in 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. Aston Zhang, Amit Goyal, Ricardo Baeza-Yates, Yi Chang, Jiawei Han, Carl A. Gunter and Hongbo Deng, “Towards Mobile Query Auto-Completion: An Efficient Mobile Application-Aware Approach”, in Proc. of 2016 Int. World-Wide Web Conf. (WWW’16), Montreal, Canada, April 2016

30. Xiuli Ma, Guanyou Zhu, Jingqian Shi, Xiang Ren 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 (AAAI16), Phoenix, AZ, Feb. 2016.

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

33. Jingsheng 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 Stream”, 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, Jingsheng Wang, Junfei Zhang, Qiming Qin, Tanvi Jindal, Jiawei Han, “A probabilistic approach to detect mixed periodic patterns from moving object data”, GeoInformatica, 2016.

2015

1. Jingjing Wang, Wenzhu Tong, Hongkun Yu, Min Li, Xiuli Ma, Haoyan Cai, Tim Harrratry, 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, in Proc. 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. Chao Zhang, 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. Youghoone 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 Parmeaswan, 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 Phrasal 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. Bolin Zhang, Hongzhang 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, Jiebo 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 WorldWide Web (WWW’15), Florence, Italy, May 2015

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

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.
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 Perodicity Discovery from Text Data”, in Proc. SPIE Vol. 9499, Next-Generation Analyst II, 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 Systems (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 Swee Spangler, “Mining Significant Interactions between Heterogeneous Entities from Unstructured Biomedical Data”, Data Mining and Knowledge Discovery (DMKD), 29(4): 976-998, 2015

36. Wei Shen, Jianyong Wang, and 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 Maalf Hassan 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 Social Media for Road Map Inference”, Transactions in GIS (T. GIS) 19(1):1-18, 2015

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

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

2014

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

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

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

4. Honglei Zhuang, Jing Zhang, George Brova, Jie Tang, Hasan Cam, Xifeng Yan and Jiawei Han, “Mining Query-Based Subnetwork Outliers in Heterogeneous Information Networks”, in Proc. of 2014 IEEE Int. Conf. on Data Mining (ICDM’14), Shenzhen, China, Dec. 2014.

5. Quanquan Gu and Jiawei Han, “ePeriodicity: Mining Event Periodicity from Incomplete Observations”, in Proc of 2015 IEEE Int. Conf on Data Mining Latent Entity Structures, Synthesis Lectures on Data Mining and Knowledge Discovery, Morgan & Claypool Publishers, 2015.
14. Dian Yu, Hongzhao Huang, Taylor Cassidy, Heng Ji, Chi Wang, Shi Zhi, Jiawei Han and Clare Voss, "The Wisdom of Minority: Unsupervised Slot Filling Validation based on Multi-dimensional Truth-Finding with Multi-layer Linguistic Indicators", in Proc. of 2014 Int. Conf. on Computational Linguistics (Coling'14), Dublin, Ireland, Aug. 2014.

15. Xiang Ren, Jialu Liu, Xiao Yu, Urvashi Khandelwal, Quanquan Gu, Lidan Wang, and Jiawei Han, "ClusCite: Effective Citation Recommendation by Information Network-Based Clustering," in Proc. 2014 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'14), New York, NY, Aug. 2014.

16. Bo Zong, Yinghui Wu, Jie Song, Ambuj Singh, Hasan Cam, Jiawei Han, XiFeng Yan, "Towards Scalable Critical Alert Mining", in Proc. 2014 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'14), New York, NY, Aug. 2014.


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, Xueqing Liu, Yanglei Song, Jiawei Han, "Scalable Moment-Based Learning for Topic Model", in Proc. 2014 ICML Workshop on Method of Moments and Spectral Learning (ICML-MMSL'14), Beijing, China, June 2014.

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

21. Yiyi Liu, Quanquan Gu, Jack P Hou, Jiawei Han and Jian Ma, "A network-assisted co-clustering algorithm to discover cancer subtypes based on gene expression", BMC Bioinformatics, 15:37, 2014.

22. Boliang Zhang, Hongzhao Huang, Xiaoman Pan, Heng Ji, Kevin Knight, ZhenWen, Yizhou Sun, Jiawei Han and Bulent Yener, "Be Appropriate and Funny: Automatic Entity Morph Encoding", in Proc. of 2014 Annual Meeting of the Association for Computational Linguistics (ACL'14), Baltimore, USA, June 2014.

23. Wei Shen, Jiawei Han, and Jianyong Wang, "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 Liu, 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 SIGKDD Int. Conf. on Management of Data (SIGKDD'14), Snowbird, UT, June 2014.

25. Fangbo Tao, Jiawei Han, Heng Ji, George Brova, Chi Wang, Brandon Norick, Ahmed El-Kishky, Jialu Liu, Xiang Ren, Yizhou Sun, "NewsNetExplorer: Automatic Construction and Exploration of News Information Networks", (system demo), in Proc. of 2014 ACM SIGKDD Int. Conf. on Management of Data (SIGKDD'14), Snowbird, UT, June 2014.

26. Jiawei Han and Chi Wang, "MiningLatent Entity Structures from Massive Unstructured and Interconnected Data", (Conference Tutorial), in Proc. of 2014 ACM SIGMOD on Management of Data (SIGMOD'14), Snowbird, UT, June 2014.

27. Jiawei Han, "Construction and Mining of Heterogeneous Information Networks: Will It Be a Key to Web-Aged Information Management and Mining?" (keynote speech slides), in Proc. of 2014 Int. Conf. on Web-Age Information Management (WAIM'14), Macau, China, June 2014..


29. Marina Danilevsky, Chi Wang, Nihit Desai, Xiang Ren, Jingyi Guo, and Jiawei Han, "Automatic Construction and Ranking of Topical Keyphrases on Collections of Short Documents", in Proc. of 2014 SIAM Int. Conf. on Data Mining (SDM'14), Philadelphia, PA,April 2014.

30. Marina Danilevsky, Arun Malloy, Siyon H. C. Cho, and Jiawei Han, "Local Learning of Mining Outlier Subgraphs from Network Datasets", in Proc. of 2014 SIAM Int. Conf. on Data Mining (SDM'14), Philadelphia, PA, April 2014.

31. Jingjing Wang, Changsung Kang, Yi Chang and Jiawei Han, "A Hierarchical Dirichlet Model for Taxonomy Expansion for Search Engines", in Proc. of 2014 Int. World-Wide Web Conf. (WWW'14), Seoul, Korea, April 2014.

32. Lidan Wang, Jimmy Lin, Donald Metzler and Jiawei Han, "Learning to Efficiently Rank on Big Data", Tutorial at 2014 Int. World-Wide Web Conf. (WWW'14), Seoul, Korea, April 2014.

33. Aston Zhang, Xing Xie, Kevin Chang, Carl Gunter, Jiawei Han and Xiaofeng Technology, "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. 2014 IEEE Int. Conf. on Data Engineering (ICDE'14), Chicago, IL, Mar. 2014.

35. Xiao Yu, Xiang Ren, Yizhou Sun, Quanquan Gu, Bradley Sturt, Urvashi Khandelwal, Brandon Norick, and Jiawei Han, "Personalized Entity Recommendation: A Heterogeneous Information Network Approach", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM'14), New York City, NY, Feb. 2014.

36. Xiao Yu, Hao Ma, Bo-June (Paul) Hsu and Jiawei Han, "On Building Entity Recommender Systems Using User Click Log and Freebase Knowledge", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM'14), New York City, NY, Feb. 2014.

37. Xiang Ren, Yujing Wang, Xiao Yu, Jun Yan, Zheng Chen, and Jiawei Han, "Heterogeneous Graph-Based Intent Learning with Queries, Web Pages and Wikipedia Concepts", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM'14), New York City, NY, Feb. 2014.

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

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

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

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

2013

1. Hyungsul 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")
386. (selected as one of the best papers for publication in the special issue of "Best of SDM 2013" in the journal "Statistical Analysis and Data Mining")

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

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

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


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

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


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

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

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

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

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

45. Lu An Tang, Xiao Yu, Sangkyum Kim, Quanquan Gu, Jiawei Han, Alice Leung, Thomas F. La Porta: Trustworthiness analysis of sensor data in cyber-physical systems. J. Comput. Syst. Sci. 79(3): 383-401 (2013)

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

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

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

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

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

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

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

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

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

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

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

57. Tarek F. Abdelzaher, Jiawei Han: A Survey of Datamining Methods for Sensor Network Bug Diagnosis. Managing and Mining Sensor Data 2013: 429-458

58. Marina Danilevsky, Chi Wang, Nihit Desai, Jingyi Guo, Jiawei Han, "KERT:Automatic Extraction and Ranking of Topical Keyphrases from Content-Representative Document Titles. CoRR abs/1306.0271 (2013)

59. Yizhou Sun and Jiawei Han, "Meta-path-based search and mining in heterogeneous information networks," IEEE Tsinghua Science and Technology, 18(4): 329-338, Aug. 2013.

60. Yizhou Sun and Jiawei Han, "Ranking Methods for Networks," accepted by Encyclopedia of Social Network Analysis and Mining, Springer, June 2013.

---

2012

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

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

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

4. Mohammad Masud, Tahseen Al-Khateeb, Latifur Khan, Charu Aggarwal, and Jiawei Han, "Recurring and Novel Class Detection using Class-Based Ensemble", in Proc. of 2012 IEEE Int. Conf. on Data Mining (ICDM’12), Brussels, Belgium, Dec. 2012.
35. Jingjing Wang and Bhaskar Prabhala, "Periodicity Based Next Place Prediction", in Proc. of Workshop on Mobile Data Challenge by Nokia, Newcastle, UK, June 2012.
36. Hongbo Deng, Jiawei Han, Michael R. Lyu and Irwin King, "Modeling and Exploiting Heterogeneous Bibliographic Networks for Expertise Ranking", in Proc. 2012 ACM/IEEE Joint Conf. on Digital Libraries (JCDL’12), Washington, D.C., June 2012. (Vannevar Bush Best Paper Award)
37. Jianbin Huang, Hei Sun, Qinbo Song, Hongbo Deng, and Jiawei Han, "Revealing Density-Based Clustering Structure from the Core-Connected Tree of a Network", accepted by IEEE Transactions on Knowledge and Data Engineering, Apr. 2012.
38. Lu-An Tang, Xiao Yu, Sangkyum Kim, Quanquan Gu, Jiawei Han, Alice Leung, Thomas La Porta, "Trustworthiness Analysis of Sensor Data in Cyber-Physical Systems", accepted by Special Issue on Data Warehousing and Knowledge Discovery from Sensors and Streams, Journal of Computer and System Sciences (JCSS), Apr. 2012.
40. Tim Weninger, Chengxiang Zhai and Jiawei Han, "Building Enriched Web Page Representations Using Link Paths", in Proc. 2012 ACM Conf. on Hypertext and Social Media (HT’12), Milwaukee, WI, June 2012.
41. Manish Gupta, Minghong Chen, Latifur Khan, Charu C. Aggarwal, Jing Gao, Jiawei Han, Ashok Srivastava and Nikunj C. Oza, "Classification and Adaptive Novel Class Detection of Feature-Evolving Data Streams", IEEE Transactions on Knowledge and Data Engineering, accepted Apr. 2012.
42. Yizhou Sun, Hongbo Deng and Jiawei Han, "Probabilistic Models for Text Mining" book chapter in Charu C. Aggarwal and ChengXiang Zhai (eds.), Mining Text Data, pp. 259-295, Kluwer Academic Publishers, 2012.
43. Heng Ji, Hongbo Deng, and Jiawei Han, "Uncertainty Reduction for Web-Scale Knowledge Discovery and Information Extraction", The Proceedings of the IEEE, 2012, accepted in March 2012.
44. Bolin Ding, Haixun Wang, Ruoming Jin, Jiawei Han, and Zhongyuan Wang, "Optimizing Index for Taxonomy Keyword Search", in Proc. 2012 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’12), Scottsdale, AZ, May 2012.
46. Liangliang Cao, John Smith, Zhen Wen, Zhijun Yin, Xin Jin, and Jiawei Han, "BlueFinder: Estimate Where A Beach Photo Was Taken" (poster paper), in Proc. 2012 Int. Conf. on Word Wide Web (WWW’12), Lyon, France, Apr. 2012.
47. Chi Wang, Wei Chen, and Yajun Wang, "Scalable Information Maximization for Independent Cascade Modelin Large-Scale Social Networks", Data Mining and Knowledge Discovery, Volume 25, Number 3 (2012), 545-576, DOI: 10.1007/s10618-012-0262-1
48. Lu-An Tang, Quanquan Gu, Xiao Yu, Jiawei Han, Thomas La Porta, Allie Leung, Tarek Abdelzaher, and Lance Kaplan, "IntraMine: Mining Intruders in Untrustworthy Data of Cyber-Physical Systems", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.
49. Xiao Yu, Quanquan Gu, Mianwei Zhou, and Jiawei Han, "Citation Prediction in Heterogeneous Bibliographic Networks", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.
50. Manish Gupta, Peixiang Zhao, and Jiawei Han, "Evaluating Event Credibility on Twitter", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.
51. Chi Wang, Jiawei Han, Qi Li, Xiang Li, Wen-Pin Lin, and Heng Ji, "Learning Hierarchical Relationships among Partially Ordered Objects with Heterogeneous Attributes and Links", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.
52. Zhijun Yin, Liangliang Cao, Quanquan Gu, and Jiawei Han, "A Probabilistic Model of Community-Based Latent Topic Analysis", ACM Transactions on Intelligent Systems and Technology (ACM TIST), 3(4), 2012, 63, doi: 10.1145/2337542.2337548
53. Quanquan Gu, Marina Danilevsky, Zhenhui Li, and Jiawei Han, "Locality Preserving Feature Learning", in Proc. 2012 Int. Conf. on Artificial Intelligence and Statistics (AISTAT’12), LaPalma, Canary Islands, April 2012.
54. Ming Ji and Jiawei Han, "A Variance Minimization Criterion to Active Learning on Graphs", in Proc. 2012 Int. Conf. on Artificial Intelligence and Statistics (AISTAT’12), La Palma, Canary Islands, April 2012.
55. Manish Gupta and Jiawei Han, "Applications of Pattern Discovery Using Sequential Data Mining", Chapter 1 in Pradeep Kumar, P. Radha Krishna, and S. Bapi Raju (eds.), Pattern Discovery Using Sequence Data Mining:Applications and Studies, IGI Global, 2012, pp. 1-23.
56. Manish Gupta and Jiawei Han, "Approaches for Pattern Discovery Using Sequential Data Mining", Chapter 8 in Pradeep Kumar, P. Radha Krishna, and S. Bapi Raju (eds.), Pattern Discovery Using Sequence Data Mining:Applications and Studies, IGI Global, 2012, pp. 137-154.
57. Jiawei Han, Yizhou Sun, Xiaofeng Yan, Philip S. Yu, "Mining Knowledge from Data: An Information Network Analysis Approach", in Proc. 2012 IEEE Int. Conf. on Data Engineering (ICDE’12), (Conference tutorial), Arlington, VA, Apr. 2012.
58. Lu-An Tang, Yu Zheng, Jing Yuan, Jiawei Han, Alice Leung, Chih-Chieh Hung, and Wen-Chih Peng, "On Discovery of Traveling Companions from Streaming Trajectories", in Proc. 2012 IEEEInt. Conf. on Data Engineering (ICDE’12), Arlington, VA, Apr. 2012.
59. Lu-An Tang, Xiao Yu, Sangkyum Kim, Jiawei Han, Yizhou Sun, Wen-Chih Peng, Hector Gonzalez, Sebastian Seith, "Multidimensional Analysis of Atypical Events in Cyber-Physical Data", in Proc. 2012 IEEE Int. Conf. on Data Engineering (ICDE’12), Arlington, VA, Apr. 2012.
60. Yizhou Sun, Jiawei Han, Charu C. Aggarwal, and Nitesh Chawla, "When Will It Happen? Relationship Prediction in Heterogeneous Information Networks", in Proc. 2012 ACM Int. Conf. on Web Search and Data Mining (WSDM’12), Seattle, WA, Feb. 2012.
61. Lu Liu, Jiawei Han, Jiawei Han, and Shiqiang Yang, "Learning Influence from Heterogeneous Social Networks", Data Mining and Knowledge Discovery, Volume 25, Number 3 (2012), 511-544, DOI: 10.1007/s10618-012-0252-3
62. Zhenhui Li, Jiawei Han, Bolin Ding, and Roland Kays, "Mining Periodic Behaviors of Object Movements for Animal and Biological Sustainability Studies", Data Mining and Knowledge Discovery, Volume 24, Number 2 (2012), 355-386, DOI: 10.1007/s10618-011-0227-9
37. H. Khac Le, J. Pasternack, H. Ahmad, 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, Dhiraj Joshi, and Jiawei Han, "Reinforced Similarity Integration in Image-Rich Information Networks", IEEE Transactions on Knowledge and Data Engineering (TKDE), accepted July 2011.

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

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

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

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

44. Chi Wang, Jie Tang, 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 ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’11), Beijing, China, July 2011. [slides]

49. Sangkyum Kim, Hyungsul Kim, Tim Weninger, 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. Hongning Wang, ChengXiang Zhai, Jiawei Han, Chi Wang, "Learning Online Discussion Structures by Conditional Random Fields", in Proc. of 2011 ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’11), Beijing, China, July 2011. [slides]

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

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


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

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

57. Peixiang Zhao, Xiaolei Li, Dong Xin, and Jiawei Han, "Graph Cube: On Warehousing and OLAP Multidimensional Networks", in Proc. of 2011 ACM SIGMOD 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 Conf. on Management of Data (SIGMOD’11), Athens, Greece, June 2011 [slides]

59. Tim Weninger, Marina Danilevsky, Fabio Fumarola, Joshua Hailpern, Jiawei Han, Ming Ji, Thomas J. Johnston, Surya Kallumadi, Hyungsul Kim, Zhijin Li, David McCluskey, Yizhou Sun, Nathan E. TeGrotenhuis, Chi Wang, and Xiao Yu, "WinaCS: Construction and Analysis of Web-Based Computer Science Information Networks", in their conference paper of 2011 USENIX Annual Technical Conference (USENIX ATC’11), system demo paper, Athens, Greece, June 2011.


61. Lalitfuran Khan, Wei Fan, Jiawei Han, Jing Gao, Mohammad Mehedy Masud, "Data Stream Mining: Challenges and Techniques", (tutorial), The 15th Pacific-Asia Conference on Knowledge and Data Mining (PAKDD 2011), Shenzhen, China, May 2011.

62. Hossein Ahmadi, Tarek Abdelzaher, Jiawei Han, Raghu K. Ganti, and Nam Pham, "On Reliable Modeling of Open Cyber-physical Systems and Its Application to Green Transportation", in Proc. of 2011 ACM/IEEE Int. Conf. on Cyber-Physical Systems (ICCP’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. Zhijun Yin, Liangliang Cao, Jiawei Han, Jiebo Luo, and Thomas Huang, "Diversified Trajectory Pattern Ranking in Geo-tagged Social Media", in Proc. of 2011 SIAM Conf. on Data Mining (SDM’11), Phoenix, AZ, Apr. 2011.

65. Hyungsul Kim, Manish Marwah, Martin Arlitt, Geoff Lyon, and Jiawei Han, "Unsupervised Disaggregation of Low Frequency Power Measurements", in Proc. of 2011 SIAM Conf. on Data Mining (SDM’11), Philadelphia, PA, Apr. 2011

66. David Lo, Bolin Ding, Luisa, 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 Qu, 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, Xiaoqiao Meng, Lu Su, Jiawei Han, "Consensus Extraction from Heterogeneous Detectors to Improve Performance over Network Traffic Anomaly Detection", in Proc. of 2011 IEEE INFOCOM Mini-Conf. (INFOCOM-Mini’10), Shanghai, China, Apr. 2011.
69. Zhijun 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 Wening, 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 Wening, 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 Wening, 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 Wening, 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", SIGKDD Explanations, 12(1):58-72, 2010.
3. Heli Sun, Jianbin Huang, Jiawei Han, Hongbo Deng, Peixiang Zhao, and Boqin Feng, "gskeleton-Cli: Density-based Network Clustering via Structure-Connected Tree Division or Agglomeration", in Proc. of 2011 Int. Conf. on Data Mining (ICDM'11), Sydney, Australia, Dec. 2010
4. Mohammad Masud, Qing Chen, Latifur Khan, Charu Aggarwal, Jing Gao, Jiawei Han, and Bhavani Thuraisingham, "Addressing Concept-Evolution in Concept-Drifting Data Streams", in Proc. of 2010 Int. Conf. on Data Mining (ICDM'10), Sydney, Australia, Dec 2010.
5. Bolin Ding, Yintao Yu, Bo Zhao, Cindy Xide Lin, Jiawei Han, and Chengxiang Zhai, "Keyword Search in Text Cube: Finding Top K Aggregated Cell Documents", in Proc. of 2010 NASA Conference on Intelligent Data Understanding (CIDU2010), Mountain View, CA, Oct. 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", in Proc. of 2010 NASA Conference on Intelligent Data Understanding (CIDU2010), Mountain View, CA, Oct. 2010.
8. Jianbin Huang, Heli Sun, Jiawei Han, Hongbo Deng, Yizhou Sun, and Yaguang Liu, "SHRINK: A Structural Clustering Algorithm for Detecting Hierarchical Communities in Networks", in Proc. 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM'10), Toronto, Canada, Oct. 2010.
9. Xin Jin, Jiawei Han, Liangliang Cao, Jiebo Luo, Bolin Ding, Cindy Xide Lin, "Visual Cube and On-Line Analytical Processing of Images", in Proc. 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM'10), Toronto, Canada, Oct. 2010.
10. Lu Liu, Jie Tang, Jiawei Han, Meng Jiang, Shiqiang Yang, "Mining Topic-Level Influence in Heterogeneous Networks", Proc. 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM'10), Toronto, Canada, Oct. 2010.
11. Tim Wening, Fabio Fumarola, Jiawei Han, Donato Malerba, "Mapping Web Pages to Database Records via Link Paths", in Proc. 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM'10), Toronto, Canada, Oct. 2010.
12. Xin Jin, Andrew Gallagher, Liangliang Cao, Jiebo Luo, and Jiawei Han, "The Wisdom of Social Multimedia: Using Flickr for Prediction and Recommendation", in Proc. 2010 ACM Multimedia Int. Conf. (ACM Multimedia'10), Florence, Italy, Oct. 2010.
13. Ming Ji, Yizhou Sun, Marina Danilevsky, Jiawei Han, and Jing Gao, "Graph Regularized Transductive Classification on Heterogeneous Information Networks", in Proc. 2010 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'10), Barcelona, Spain, Sept. 2010.
14. Hyung Sul Kim, Sangkyum Kim, Tim Wening, Jiawei Han, and Tarek Abdelzaher, "NDPn Mine: Efficiently Mining Discriminative Numerical Features for Pattern-Based Classification", in Proc. 2010 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'10), Barcelona, Spain, Sept. 2010.
15. Mohammad M. Masud, Qing Chen, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "Classification and Novel Class Detection in Data Streams in a Dynamic Feature Space", in Proc. 2010 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'10), Barcelona, Spain, Sept. 2010.
17. Zhenhui Li, Bolin Ding, Jiawei Han, and Roland Kays, "Swarm: Mining Relaxed Temporal Moving Object Clusters", in Proc. 2010 Int. Conf. on Very Large Data Bases (VLDB'10), Singapore, Sept. 2010.
18. Peixiang Zhao and Jiawei Han, "OnGraph Query Optimization in Large Networks", in Proc. 2010 Int. Conf. on Very Large Data Bases (VLDB'10), Singapore, Sept. 2010 (slides).
19. Zhijun Yin, Manish Gupta, Tim Wening, and Jiawei Han, "A Unified Framework for Link Recommendation Using Random Walks", in Proc. 2010 Int. Conf. on Advances in Social Networks Analysis and Mining (ASONAM'10), Odense, Denmark, Aug. 2010.
20. Sangkyum Kim, Xin Jin, and Jiawei Han, "DisClass: Discriminative Frequent Pattern-Based Image Classification", in Proc. 2010 KDD Workshop on Multimedia Data Mining (MM'10), Washington, D.C., July 2010.
21. Jiawei Han, "Mining Useful Patterns: An Evolutionary View", (Keynote Speech), in 2010 SIGKDD workshop on Useful Patterns (UP'10), Washington D.C., July 2010.
22. Yizhou Sun, Tim Wening, Jiawei Han, Manish Gupta, and Bo Zhao, "Community Evolution Detection in Dynamic Heterogeneous Information Networks", in Proc. 2010 KDD Workshop on Mining and Learning with Graphs (MLG'10), Washington D.C., July 2010.
23. Tim Wexler, Surya Ramachandran, Daniel Greene, Jack Hart, Anand Kancherlapalli, William H. Hsu, and Jiawei Han, "Speech-Assisted Radiology System for Retrieval, Reporting and Annotation", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD'10), (demo paper), Washington D.C., July 2010.

24. Jing Gao, Feng Liang, Wei Fan, Chi Wang, Yizhou Sun, and Jiawei Han, "Community Outliers and their Efficient Detection in Information Networks", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD'10), Washington D.C., July 2010.

25. Zhenhui Li, Bolin Ding, Jiawei Han, Roland Kays, and Peter Nye, "Mining Periodic Behaviors for Moving Objects", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD'10), Washington D.C., July 2010.

26. Cindy Xide Lin, Bo Zhao, Qiaozhu Mei, and Jiawei Han, "A Statistical Model for Popular Event Tracking in Social Communities", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD'10), Washington D.C., July 2010.

27. Chi Wang, Jiawei Han, Yuntao Jia, Jie Tang, Duo Zhang, Yintao Yu, and Jingyi Guo, "Mining Advisor-Advisee Relationships from Research Publication Networks", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD'10), Washington D.C., July 2010.

28. Jiawei Han, Yizhou Sun, Xifeng Yan, and Philip S. Yu, "Mining Heterogeneous Information Networks", Tutorial at the 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD'10), Washington D.C., July 2010.

29. Zhenhui Li, Ming Ji, Jae-Gil Lee, LuAn Tang, Yintao Yu, Jiawei Han, and Roland Kays, "MoveMine: Mining Moving Object Databases" (extended abstract), in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD'10), Indianapolis, Indiana, June 2010.

30. Jiawei Han, Yizhou Sun, Xifeng Yan, and Philip S. Yu, "Mining Knowledge from Databases: An Information Network Analysis Approach" (tutorial), in Proc. 2010 ACM SIGMOD Conf. on Management of Data (SIGMOD'10), Indianapolis, Indiana, June 2010.

31. Mohammad M. Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "Classification and Novel Class Detection in Data Streams with Active Mining", in Proc. 2010 ACM Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD'10), Hyderabad, India, June 2010.

32. Cindy Xide Lin, Yintao Yu, Jiawei Han, and Bing Liu, "Hierarchical Clustering of Webpages via Cross-Page and In-Page Link Structures", in Proc. 2010 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD'10), Hyderabad, India, June 2010.

33. Jin Lin, Jiawei Han, and Jiawei Han, "On the Power of Ensemble: Supervised and Unsupervised Methods Reconciled", Tutorial at 2010 SIAM Data Mining Conf. (SDM'10), Columbus, Ohio, May 2010.

34. Jiawei Han, "Data Mining: Dynamic Past and Promising Future", Panel Talk at 2010 SIAM Data Mining Conf. (SDM'10), Columbus, Ohio, April 2010.

35. Mohammad Mafi Hasan Khan, Hieu K. Le, Michael LeMay, Parya Moinazadeh, Lili Wang, Yong Yang, Dong K. Noh, Tarek Abdelzaher, Carl A. Gunter, Jiawei Han, Xin Jin, "Diagnostic Powertracing for Sensor Node Failure Analysis", in Proc. 2010 Int. Conf. on Information Processing in Sensor Networks (IPSN'10), Stockholm, Sweden, April 2010.

36. Xin Jin, Scott Spangler, Rui Ma, and Jiawei Han, "Topic Initiator Detection on the World Wide Web", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010.

37. Tim Weninger, William H. Hsu, and Jiawei Han, "CETR Content Extraction via Tag Ratios", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010.

38. Xin Jin, Jiebo Luo, Jie Yu, Gang Wang, Dhiraj Joshi, and Jiawei Han, "RIN: Image Retrieval in Image Rich Information Networks", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010. (demo paper)

39. Zhenhui Li, Ding Zhou, YunFang Juan, and Jiawei Han, "Keyword Extraction for Social Snippets", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010. (postpaper)

40. Liangliang Cao, Andrey Del Pozo, Xin Jin, Jiebo Luo, Jiawei Han, and Thomas S. Huang. "RankCompete: Simultaneous Ranking and Clustering of Web Nodes", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010. (poster paper)

41. Cindy Xide Lin, Bo Zhao, Tim Weninger, Jiawei Han, and Bing Liu, "Entity Relation Discovery from Web Tables and Links", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010. (paper)

42. Zhijun Yin, Manish Gupta, Tim Weninger and Jiawei Han, "LINKRECC: A Unified Framework for Link Recommendation with User Attributes and Graph Structure", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010. (poster paper)

43. Jie Yu, Xin Jin, Jiawei Han, and Jiebo Luo, "Social Group Suggestion from User Image Collections", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010. (poster paper)

44. Liangliang Cao, Jiebo Luo, Andrew Gallagher, Xin Jin, Jiawei Han,and Thomas S. Huang. "A Worldwide TourismRecommendation System Based on Geotagged Web Photos", in Proc. 2010 Int. Conf. on Acoustics, Speech, and Signal Processing (ICASSP'10), Dallas, TX, March 2010.

45. Jiawei Han, Zhenhui Li, and LuAn Tang, "Mining Moving Object and Traffic Data", in Proc. 2010 Int. Conf. on Database Systems for Advanced Applications (DASFAA'10), (Conference Tutorial), Tsukuba, Japan, April 2010.

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

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

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

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

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

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

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

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

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

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

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

57. Charu C. Aggarwal, Chen Chen and Jiawei Han, "The Inverse Classification Problem", Journal of Computer Science and Technology, accepted, Dec. 2009.
1. Yizhou Sun, Jiawei Han, Jing Gao, and Yingtao Yu, “iTopicModel: Information Network-Integrated Topic Modeling”, in Proc. 2009 Int. Conf. on Data Mining (ICDM'09), Miami, FL, Dec. 2009.
2. Xiaoyu Gu, 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-So 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. Jiawei Han, “Mining Heterogeneous Information Networks 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 Technique to Classify 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.
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-So 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, Xinfeng 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 Jiawei Han, Binbin Liao, Tianyi Wu, Chengxiang Zhai, Duo Zhang, and Bo Zhao, “INextCube: Information Network-Enhanced Text Cube”, in Proc. 2009 Int. Conf. on Very Large Data Bases (VLDB'09) (system demo), Lyon, France, Aug. 2009.
15. David Lo, Hong Cheng, Jiawei Han, SiauCheng Khoo, and Chengnian Sun, “Classification of Software Behaviors for Failure Detection: A Discriminative Pattern Mining Approach”, in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'09), Paris, France, June 2009.
16. Yizhou Sun, Yintao Yu, and Jiawei Han, “Ranking-Based Clustering of Heterogeneous Information Networks with Star Network Schemes”, in Proc. 2009 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'09), Paris, France, June 2009.
17. Zhijun Yin, Rui Li, Qiaozhu Mei, and Jiawei Han, “Exploring 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, Xinfeng Yan, Xiaofei He, Xiaohui Wang, Hujun Bao, Jiawei Han, “Locality Preserving Nonnegative Matrix Factorization”, in Proc. 2009 Int. Joint Conf. on Art. Int. Inteligence(UAI-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, Hai Feng 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 Gretton, Jiawei Han, Hans-Peter Kriegel, Alexander J. Smola, Le Song, Philip S. Yu, Xinfeng Yan, and Karsten M. 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 Database Technology (EDBT'09), Saint-Petersburg, Russia, Mar. 2009.
27. Jiawei Han, Xinfeng Yan, and Philip S. Yu, “Scalable OLAP and Mining of Information Networks”, in Proc. 2009 Int. Conf. on Extending Database Technology (EDBT'09), Saint-Petersburg, Russia, Mar. 2009.
28. Bolin Ding, David Lo, Jiawei Han, and Siau-Cheng Khoo, “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.

31. Feida Zhu, Xifeng Yan, Jiawei Han and Philip S. Yu, "Mining Frequent Approximate Sequential Patterns", in H. Kargupta, et al., (eds.), Next Generation of Data Mining, Chapman & Hall, 2009.

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


2008

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

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

3. Bin Xie, Xiulin 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, Lalitfur Khan, Jiawei Han, and Bhavani Thuraisingham, "A Practical Approach to Classify 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 Masud, Lalitfur Khan, Heiu Le, Hossein Ahmadi, Tarek Abdelzaher, and Jiawei Han, "DustMiner: Troubleshooting Interactive Complexity Bugs in Sensor Networks", in Proc. 2008 ACM Int. Conf. on Embedded Networked Sensor Systems (SenSys'08), Raleigh, NC, Nov. 2008.

8. Chen Chen, Cindy Xie 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. Bing Jiang, Jin-Pi, Wenmin 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 Hwang 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", in 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", in 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 StatisticalOLAP over Sampling Data", in Proc. 2008 ACM SIGKDD Int. Conf. on Management of Data (SIGMOD'08), Vancouver, BC, Canada, June 2008.

19. Yizhou Sun, Tianyi Wu, Hong Cheng, Jiawei Han, Xiaoxin 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 (SDM'08), Atlanta, GA, April 2008.

21. Ying Yuan, Kyuhyung Lee, Hong Cheng, Gopal Krishna, Zhenmin Li, Xiao Ma, Yuanyuan Zhou and Jiawei Han, "CISpan: Comprehensive Incremental Mining Algorithms of Closed Sequential Patterns for Multi-Versional Software Mining", in Proc. 2008 SIAM Int.Conf. on Data Mining (SDM'08), Atlanta, GA, April 2008.

22. Deng Cai, Xiaofei 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. Xiaolei 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.
2007

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

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

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

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

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

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

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

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

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

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

12. 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.

13. Hector Gonzalez, Jiawei Han, and Kwun Chung, "Locality Sensitive Discriminant Analysis", in Proc. 2007 IEEE Int. Conf. on Data Engineering (ICDE'07), Istanbul, Turkey, April 2007.
2006

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

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

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

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

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

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

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

8. Dong Xin, Jiawei Han, Hong Cheng, and Xiaolei Li, "Answereing 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 Klakjian, "Warehousing and Mining Massive RFID Data Sets", (Keynote Speech), 2006 ACM Conf. on Advance Data Mining and Its Applications (ADMA'06), Xian, 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 Int. 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 (ISI'06), San Diego, CA, May 2006.

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

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

20. Chao Liu, Xifeng Yan, and Jiawei Han, "Mining Control Flow Abnormality for Logic Error Isolation," in Proc. 2006 SIAM Int. Conf. on Data Mining (SDM'06), Bethesda, MD, April2006.

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

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

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

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

25. Xifeng Yan, Feida Zhu, Jiawei Han, and Philip S. Yu, "Searching Substructures with Superimposed Distance", in Proc. 2006 Int. Conf. on Data Engineering (ICDE'06), Atlanta, Georgia, April 2006.
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 Multi-relational Naïve Bayesian Classifier Based on Semantic Relationship Graphs", in Proc. 2005 ACM-SIGKDD Workshop on Multi-Relational Data Mining (KDD/MRDM’05), Chicago, IL, Aug. 2005.

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

8. J. Han, P. 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, J. Z. 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 (SSDWM’05), Santa Barbara, CA, June 2005.


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

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

21. H. Cheng, X. Yan, and J. Han, "SeqIDIndex: 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, 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. Bandypadhyay et al. (eds.), Advanced Methods for Knowledge Discovery from Complex Data, Springer Verlag, 2005.

26. Hwanjo Yu, Jiong Yang, Jiawei Han, and Xiaolei Li, "Making SVM Scalable to Large Data Sets Using Hierarchical Indexing", Data Mining and Knowledge Discovey, 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, Halleng 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 and Practice of Knowledge Discovery in Databases (PKDD'04), Pisa, Italy, Sept. 2004.

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

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

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

5. H. Cheng, X. Yan, and J. Han, "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. 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. Y. 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 (PKDD'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. Larm, J. Pei, K. Wang, and W. Zou, "Mining Constrained Gradients in Multi-Dimensional Databases", IEEE Transactions on Knowledge and Data Engineering, 16(6), 2004.

19. X. Yin, J. Han, J. Yang, and P. S. Yu, "CrossMine: Efficient Classification across Multiple Database Relations", in Proc. 2004 Int. Conf. on Data Engineering (ICDE'04), Boston, MA, March 2004.

20. J. Wang and J. Han, "BIDE: Efficient Mining of Frequent Closed Sequences", in Proc. 2004 Int. Conf. on Data Engineering (ICDE'04), Boston, MA, March 2004.

21. J. Han, J. Pei, and X. Yan, "Sequential Pattern Mining by Pattern-Growth: Principles and Extensions," in W. W. Chu and T. Y. Lin (eds.), Recent Advances in Data Mining and Granular Computing (Mathematical Aspects of Knowledge Discovery), Springer Verlag, 2004.


23. J. Han, J. Pei, and X. Yan, "Sequential Pattern Mining by Pattern-Growth: Principles and Extensions," in W. W. Chu and T. Y. Lin (eds.), Recent Advances in Data Mining and Granular Computing (Mathematical Aspects of Knowledge Discovery), Springer Verlag, 2004.


2003

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

2002

1. Jiawei Han, Jiayong 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 Jiayong 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 SIGKDD02 Conf.), (BIOKDD'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, and 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 ACM-SIGMOD Intl. Conf. on Very Large Data Bases (VLDB'01), Rome, Italy, Sept. 2001.

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

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

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

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

10. J. Han, 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 Intl. 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 Scalable 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): 939-958, 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.


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)", (Slides), 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 (PKDD'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 (PKDD'00), Kyoto, Japan, April 2000.

13. O. R. Zaiane, 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), San Diego, CA, March 2000.

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