Research Publications - Data Mining Research Group at CS, UIUC

2019

1. Qi Zhu, Xiang Ren, Jingbo Shang, Yu Zhang, Ahmed El-Kishky and Jiawei Han, "Integrating Local Context and Global Cohesiveness for Open Information Extraction", in Proc. 2019 ACM Int. Conf. on Web Search and Data Mining (WSDM’19), Melbourne, Australia, Feb. 2019
2. Jiaming Shen, Ruiliang Lyu, Xiang Ren, Michelle Vanni, Brian Sadler, Jiawei Han, "Mining Entity Synonyms with Efficient Neural Set Generation", in Proc. 2019 AAAI Conf. on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, Jan. 2019
3. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, "Weakly-Supervised Hierarchical Text Classification", in Proc. 2019 AAAI Conf. on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, Jan. 2019
4. Xuan Wang, Yu Zhang, Xiang Ren, Yuhao Zhang, Marinka Zitnik, Jingbo Shang, Curtis Langlotz, and Jiawei Han, "Cross-type Biomedical Named Entity Recognition with Deep Multi-Task Learning", Bioinformatics (accepted), Oct. 2018 (to appear 2019)

2018

1. Xiang Ren and Jiawei Han, Mining Structures of Factual Knowledge from Text: An Effort-Light Approach. Morgan & Claypool Publishers. 2018. (Ren's thesis: 2018 ACM SIGKDD Dissertation Award)
2. Jingbo Shang, Jialiu Liu, Meng Jiang, Xiang Ren, Clare R Voss, Jiawei Han, "Automated Phrase Mining from Massive Text Corpora", IEEE Transactions on Knowledge and Data Engineering, 30(10):1825-1837 (2018)
3. Jingbo Shang, Meng Jiang, Wenzhu Tong, Jinfeng Xiao, Jian Peng, Jiawei Han. "DPPred: An Effective Prediction Framework with Concise Discriminative Patterns", IEEE Transactions on Knowledge and Data Engineering, 30(7): 1226-1239 (2018)
4. Chenguang Wang, Yangqiu Song, Haoan Li, Ming Zhang, Jiawei Han, "Unsupervised meta-path selection for text similarity measure based on heterogeneous information networks", Data Mining and Knowledge Discovery, 32(6): 1735-1767 (2018)
5. Chao Zhang, Dongming Lei, Quan Yuan, Honglei Zhuang, Lance M. Kaplan, Shaowen Wang, Jiawei Han, "GeoBurst+: Effective and Real-Time Local Event Detection in Geo-Tagged Tweet Streams", ACM Transactions on Intelligent Systems and Technology (TIST) 9(3): 34:1-24 (2018)
6. Wei Shen, Jiawei Han, Jianyong Wang, Xiaojia Yuan, Zhenglu Yang, "SHINE+: A General Framework for Domain-Specific Entity Linking with Heterogeneous Information Networks", IEEE Transactions on Knowledge and Data Engineering, 30(2): 353-366 (2018)
7. Xuan Wang, Yu Zhang, Qi Li, Cathy Wu, and Jiawei Han, "PENNER: Pattern-enhanced Nested Named Entity Recognition in Biomedical Literature", Proc. 2018 Int. Conf. on Bioinformatics and Biomedicine (BIBM’18), Madrid, Spain, Dec. 2018
8. Qi Li, Xuan Wang, Yu Zhang, Fei Ling, Cathy Wu, and Jiawei Han, "Pattern Discovery for Wide-Window Open Information Extraction in Biomedical Literature", Proc. 2018 Int. Conf. on Bioinformatics and Biomedicine (BIBM’18), Madrid, Spain, Dec. 2018
9. Shi Zhi, Fan Yang, Zheyi Zhu, Qi Li, Zhaoran Wang, and Jiawei Han, "Dynamic Truth Discovery on Numerical Data", in Proc of 2018 IEEE Int. Conf. on Data Mining (ICDM’18), Singapore, Nov. 2018
10. Carl Yang, Yichen Feng, Pan Li, Yu Shi, and Jiawei Han, "Meta-Graph Based HIN Spectral Embedding: Methods, Analyses, and Insights", in Proc of 2018 IEEE Int. Conf. on Data Mining (ICDM’18), Singapore, Nov. 2018
11. Fangbo Tao, Chao Zhang, Xiusi Chen, Meng Jiang, Tim Hanratty, Lance Kaplan, and Jiawei Han, "Doc2Cube: Automated Document Allocation to Text Cube via Dimension-Aware Joint Embedding", in Proc of 2018 IEEE Int. Conf. on Data Mining (ICDM’18), Singapore, Nov. 2018
12. Doris Xin, Ahmed El-Kishky, De Liao, Brandon Norick, and Jiawei Han, "Active Learning on Heterogeneous Information Networks: A Multi-armed Bandit Approach", in Proc of 2018 IEEE Int. Conf. on Data Mining (ICDM’18), Singapore, Nov. 2018
13. Jingbo Shang, Liyuan Liu, Xiaotao Gu, Xiang Ren, Teng Ren and Jiawei Han, "Learning Named Entity Tagger using Domain-Specific Dictionary", in Proc of 2018 Conf. on Empirical Methods in Natural Language Processing (EMNLP’18), Brussels, Belgium, Oct. 2018
14. Liyuan Liu, Xiang Ren, Jingbo Shang, Xiaotao Gu, Jian Peng and Jiawei Han, "Efficient Contextualized Representation: Language Model Pruning for Sequence Labeling", in Proc of 2018 Conf. on Empirical Methods in Natural Language Processing (EMNLP’18), Brussels, Belgium, Oct. 2018
15. Quan Yuan, Xiang Ren, Wengi He, Chao Zhang, Xinhe Geng, Lilu Huang, Heng Ji, Chin-Yew Lin and Jiawei Han, "Open-Schema Event Profiling for Massive News Corpora", in Proc of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM’18), Turin, Italy, Oct. 2018
16. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, "Weakly-Supervised Neural Text Classification", in Proc of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM’18), Turin, Italy, Oct. 2018
17. Jingbo Shang, Jiaming Shen, Tianhang Sun, Xingbang Liu, Anja Gruenheid, Flip Korn, Adam Lelkes, Cong Yu and Jiawei Han, "Investigating Rumor News Using Agreement-Aware Search", in Proc of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM’18), Turin, Italy, Oct. 2018
18. Carl Yang, Mengxiong Liu, Frank He, Xikun Zhang, Jian Peng, and Jiawei Han, "Similarity Modeling on Heterogeneous Networks via Automatic Path Discovery", in Proc of 2018 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD’18), Dublin, Ireland, Sept. 2018
19. Carl Yang, Mengxiong Liu, Vincent W. Zheng and Jiawei Han, "Node, Motif and Subgraph: Leveraging Network Functional Blocks Through Structural Convolution", in Proc of 2018 IEEE/ACM Int. Conf. on Social Networks Analysis and Mining (ASONAM’18), Barcelona, Spain, Aug. 2018
20. Xuan Wang, Yu Zhang, Qi Li, Yinyin Chen and Jiawei Han, "Open Information Extraction with Meta-pattern Discovery in Biomedical Literature", in Proc. of 2018 ACM Conf. on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB’18), Washington, DC, August 2018
21. Jingbo Shang, Chao Zhang, Jiaming Shen, Jiawei Han, "Towards Multidimensional Analysis of Text Corpora", Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), (Conference Tutorial), London, UK, Aug. 2018
22. Jingbo Shang, Qi Zhu, Jiaming Shen, Xuan Wang, Xiaotao Gu, Lance Kaplan, Timothy Harratty and Jiawei Han, "AutoNet: Automated Network Construction and Exploration System from Domain-Specific Corpora", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), (demo paper), London, UK, Aug. 2018
23. Jiaming Shen, Jinfeng Xiao, Yu Zhang, Carl Yang, Jingbo Shang, Jinda Han, Saurabh Sinha, Peipei Ping, Richard Weinshilboum, 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, Aug. 2018
24. Hanwen Cui, Jian Tang, Jiaming Shen, Keqian Li, Warren Greiff, Michelle Vanni, Jiawei Han and Xifeng Yan, "FITS: 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, Aug. 2018
25. Carl Yang, Xiaolin Shi, Jie Luo and Jiawei Han, "I Know You’ll Be Back: Interpretable New User Clustering and Churn Prediction on a Mobile Social Application", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, Aug. 2018
26. Chao Zhang, Fangbo Tao, Xiuci 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, Aug. 2018
27. Qi Li, Meng Jiang, Xikun Zhang, Meng Qu, Timothy Hartratty, 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, Aug. 2018
28. Jiaming Shen, Zeqiu Wu, Dongming Lei, Chao Zhang, Xiang Ren, Michelle T. Vanni, Brian M. Sadler and Jiawei Han, "HiExpan: Task-Guided Taxonomy Construction by Hierarchical Tree Expansion", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, Aug. 2018
29. Yu Shi, Qi Zhu, Fang Guo, Chao Zhang and Jiawei Han, "Easing Embedding Learning by Comprehensive Transcription of Heterogeneous Information Networks", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’18), London, UK, Aug. 2018
30. Yuchen Li, Zhengzhi Lou, Yu Shi and Jiawei Han, "Temporal Motifs in Heterogeneous Information Networks", in Proc. of 2018 Int. Workshop on Mining and Learning with Graphs (MLG’18), co-located with KDD’18, London, UK, Aug. 2018
31. Yuning Mao, Xiang Ren, Jiaming Shen, Xiaotao Gu and Jiawei Han, "End-to-End Reinforcement Learning for Automatic Taxonomy Induction", in Proc. of 2016 Annual Meeting of the Association for Computational Linguistics (ACL’16), Melbourne, Australia, July 2016
32. Jiaming Shen, Jinfeng Xiao, Xinwei He, Jingbo Shang, Saurabh Sinha and Jiawei Han, "Entity Set Search of Scientific Literature: An Unsupervised Ranking Approach", in Proc. of 2018 Int. ACM SIGIR Conf. on Research and Development in Information Retrieval (SIGIR’18), Ann Arbor, MI, July 2018
33. Ahmed El-Kishky, Frank Xu, Aston Zhang, Stephen Macke and Jiawei Han, "Entropy-Based Subword Mining for Word Embeddings", in Proc. of the 2nd Workshop on Subword and Character Level Models in NLP (SCLeM’18) (at NAACL 2018), New Orleans, LA, June 2018
34. Yu Shi, Huan Gui, Qi Zhu, Lance Kaplan,Jiawei Han, "AspEm: Embedding Learning by Aspects in Heterogeneous Information Networks," in Proc. of 2018 SIAM Int. Conf. on Data Mining (SDM’18), San Diego, CA, May 2018
35. Meng Qu, Jiaming Shen, Yu Zhang, and Jiawei Han, "Weakly-supervised Relation Extraction by Pattern-enhanced Embedding Learning", in Proc. of 2018 Int. Conf. on World-Wide Web (WWW’18), Lyon, France, Apr. 2018
36. Qi Zhu, Xiang Ren, Jingbo Shang, Yu Zhang, Frank F. Xu and Jiawei Han, "Open Information Extraction with Global Structure Constraints", (poster paper), Proc. of 2018 Int. Conf. on World-Wide Web (WWW’18), Lyon, France, Apr. 2018 (received WWW’18 best poster award honorable mention)
37. Carl Yang, Chao Zhang, Jiawei Han, Xuewen Chen, Jieping Ye, "Did You Enjoy the Ride: Understanding Passenger Experience via Network Embedding Framework", Proc. of 2018, IEEE International Conference on Data Engineering, Paris, France, April 2018
38. Liyuan Liu, Jingbo Shang, Frank Xu, Xiang Ren, Huan Gui, Jian Peng and Jiawei Han, "Empower Sequence Labeling with Task-Aware Neural Language Model", in Proc. of 2018 AAAI Conf. on Artificial Intelligence (AAAI’18), New Orleans, LA, Feb. 2018
39. Chao Zhang, Mengxiong Liu, Zhengchao Liu, Carl Yang, Luming Zhang, Jiawei Han, "Spatiotemporal Activity Modeling Under Data Scarcity: A Graph-Regularized Cross-Modal Embedding Approach", in Proc. of 2018 AAAI Conf. on Artificial Intelligence (AAAI’18), New Orleans, LA, Feb. 2018
40. Wanzheng Zhu, Chao Zhang, Shuchao Yao, Xiaobin Gao, Jiawei Han, "A Spherical Hidden Markov Model for Semantics-Rich Human Mobility Modeling", in Proc. of 2018 AAAI Conf. on Artificial Intelligence (AAAI’18), New Orleans, LA, Feb. 2018
41. Zeqiu Wu, Xiang Ren, Frank F. Xu, Ji Li and Jiawei Han, "Indirect Supervision for Relation Extraction using Question-Answer Pairs", in Proc. of 2018 ACM Int. Conf. on Web Search and Data Mining (WSDM’18), Los Angeles, CA, Feb. 2018
42. Meng Qu, Jian Tang, and Jiawei Han, "Curriculum Learning for Heterogeneous Star Network Embedding via Deep Reinforcement Learning", in Proc. of 2018 ACM Int. Conf. on Web Search and Data Mining (WSDM’18), Los Angeles, CA, Feb. 2018
43. Jiawei Han, "On the Power of Massive Text Data", (keynote speech), in Proc. of 2018 ACM Int. Conf. on Web Search and Data Mining (WSDM’18), Los Angeles, CA, Feb. 2018

2017

1. Adit Krishnan, Aravind Sankar, Shi Zhi, Jiawei Han, "Unsupervised Concept Categorization and Extraction from Scientific Document Titles", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM’17), Singapore, Nov. 2017
2. Meng Qu, Jian Tang, Jingbo Shang, Xiang Ren, Ming Zhang, Jiawei Han, "An Attention-based Collaboration Framework for Multi-View Network Representation Learning", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM’17), Singapore, Nov. 2017
3. Chenguang Wang, Yangqiu Song, Haoan Li, Yizhou Sun, Ming Zhang, Jiawei Han, "Second-Order Heterogeneous Information Network Similarity for Text", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM’17), Singapore, Nov. 2017
4. Quan Yuan, Jingbo Shang, Xin Cao, Chao Zhang, Xinhe Geng, Jiawei Han, "Detecting Multiple Periods and Periodic Patterns in Event Time Sequences", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM’17), Singapore, Nov. 2017
5. Shi Zhi, Yicheng Sun, Jiayi Liu, Chao Zhang and Jiawei Han, “ClaimVerif: A Real-time Claim Verification System Using the Web and Fact Databases” (system demo), in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM’17), Singapore, Nov. 2017

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

7. Huan Gui, Jialu Liu, Fangbo Tao, Meng Jiang, Brandon Norick, Lance Kaplan and Jiawei Han, “Embedding Learning with Events in Heterogeneous Information Networks”, IEEE Transactions on Knowledge and Data Engineering, 29(11): 2428-2441, 2017

8. Jiaonan Guo, Zeqiu Wu, Dongming Lei, Chenhui Li, Jingbo Shang, Xiang Ren, Jiawei Han, “SetExpan: Corpus-based Set Expansion via Context Feature Selection and Rank Ensemble”, in Proc. of 2016 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD’16), Skopje, Macedonia, Sept. 2017

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

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

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

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

13. Meng 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

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

15. Chao Zhang, 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

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

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

18. Chao Zhang, Dongming Lei, Quan Yuan, Honglei Zhuang, Lance Kaplan, Shaowen Wang, Jiawei Han, “GeoBurst+: Effective and Real-time Local Event Detection in Geo-Tagged Tweet Streams”, accepted by ACM Transactions on Intelligent Systems and Technology (TIST), 2017

19. Xiuli Ma, Guanyou Zhuo, Jingbo Shang, Jingjing Wang, Juan Peng, and Jiawei Han, “Detection of Complexes in Biological Networks through Diversified Dense Subgraphs Mining”, Journal of Computational Biology, 24 (9): 923–941, 2017

20. Xiang Ren, Jamie 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


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


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


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

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

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

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

30. Wenjun Jiang, Chenglin Miao, Lu Su, Qi Li, Shaohuan 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, Melchun Hau, 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. Fangbo Tao, Honglei Zhuang, Chi Wang Yu, Qi Wang, Taylor Cassidy, Lance Kaplan, Clare Voss, Jiawei Han, "Multi-Dimensional, Phrase-Based Summarization in Text Cubes", Data Eng. Bulletin 39(3), Sept. 2016, pp. 74-84.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

27. Jialu Liu, Xiang Ren, Jingbo Shang, Taylor Cassidy, Clare Voss and Jiawei Han, "Representing Documents via Latent Keyphrase Inference", in Proc. of 2016 Int. World-wide Web Conf. (WWW’16), Montreal, Canada, April 2016

28. Yang Li, Shulong Tan, Huan Sun, Jiawei Han, Dan Roth and Xileng Yan, "Entity Disambiguation with Linkless Knowledge Bases", in Proc. of 2016 Int. World-wide Web Conf. (WWW’16), Montreal, Canada, April 2016

29. Asst 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, Guanguy Zhou, Jingjing Wang, Jian Peng, and Jiawei Han, "Complexes Detection in Biological Networks via Diversified Dense Subgraphs Mining", in Proc. of 2016 Int. Conf. on Research in Computational Molecular Biology (RECOMB’16), Los Angeles, CA, Apr., 2016
31. Chenguang Wang, Yangqiu Song, Haoran Li, Ming Zhang and Jiawei Han, "Text Classification with Heterogeneous Information Network Kernels", in Proc. of 2016 AAAI Conf. on Artificial Intelligence (AAAI’16), Phoenix, AZ, Feb. 2016
32. Min Li, Jingjing Wang, Wenzhu Tong, Hongkun Yu, XiuLi Ma, Yucheng Chen, Haoyan Cai, Jiawei Han, "EKNOT: Event Knowledge from News and Opinions in Twitter", Proc. of AAAI Conf. on Artificial Intelligence (AAAI’16) (system demo), Phoenix, AZ, Feb. 2016
33. Jingjing Wang, Min Li, Jiawei Han and Xiaolong Wang, "Modeling Check-in Preferences with Multidimensional Knowledge: A Minimax Entropy Approach", in Proc. of 2016 Int. Conf. on Web Search and Data Mining (WSDM’16), San Francisco, CA, Feb. 2016.
34. Latifur Khan "Recurring and Novel Class Detection using Class-Based Ensemble for Evolving Data 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, Jingjing Wang, Junfei Zhang, Qiming Qin, Tanvi Jindal, Jiawei Han, "A probabilistic approach to detect mixed periodic patterns from moving object data", Geoinformatica, 2016.
37. Xiaolong Wang, Jingbo Shang, Henery Lin, Doris Xin, Xiang Ren, Jiawei Han, and Jian Peng, "DWCox: A density-weighted Cox model for outlier-robust prediction of prostate cancer survival", F1000 Research, 2016.

2015

1. Jingjing Wang, Wenzhu Tong, Hongkun Yu, Min Li, XiuLi Ma, Haoyan Cai, Tim Hanratty, and Jiawei Han, "Mining Multi-Aspect Reflection of News Events in Twitter: Discovery, Linking and Presentation", in Proc. of 2015 IEEE Int. Conf. on Data Mining (ICDM’15), Atlantic City, NJ, Nov. 2015
2. Chenguang Wang, Yangqiu Song, Haoran Li, Ming Zhang and Jiawei Han, "KnowSim: A Document Similarity Measure on Structured Heterogeneous Information Networks", in Proc. of 2015 IEEE Int. Conf. on Data Mining (ICDM’15), Atlantic City, NJ, Nov. 2015
3. Ahmed El-Kishky, Yanglei Song, Chi Wang, Clare R. Voss, and Jiawei Han, "Scalable Topical Phrase Mining from Text Corpora", PVLDB 8(3): 305 - 316, 2015. Also, in Proc. 2015 Int. Conf. on Very Large Data Bases (VLDB’15), Kohala Coast, Hawaii, Sept. 2015
4. Qi Li, Yaliang Li, Jing Gao, Lu Su, Bo Zhao, Murat Demirbas, Wei Fan, and Jiawei Han, "A Confidence-Aware Approach for Truth Discovery on Long-Tail Data", PVLDB 8(4): 425-436, 2015. Also, in Proc. 2015 Int. Conf. on Very Large Data Bases (VLDB’15), Kohala Coast, Hawaii, Sept. 2015
5. Jing Gao, Qi Li, Bo Zhao, Wei Fan, and Jiawei Han, "Truth Discovery and Crowdsourcing Aggregation: A Unified Perspective", PVLDB 8 (12): 2048-2059 (2015). Also, in Proc. 2015 Conf. on Very Large Data Bases (VLDB’15) (conference tutorial), Kohala Coast, Hawaii, Sept. 2015.
6. Shi Zhi, Jiawei Han, and Quanquan Gu, "Robust Classification of Information Networks by Consistent Graph Learning", in Proc. of 2015 European Conf. on Machine Learning and Principles and Practices of Knowledge Discovery in Databases (ECMLPKDD’15), Porto, Portugal, Sept. 2015.
7. Chao Zhang, Shan Jiang, Yucheng Chen, Yidan Sun, and Jiawei Han, "Fast Inbound Top-K Query for Random Walk with Restart", in Proc. of 2015 European Conf. on Machine Learning and Principles and Practices of Knowledge Discovery in Databases (ECMLPKDD’15), Porto, Portugal, Sept. 2015. (Received the Best Student Paper Runner-Up award at ECML/PKDD 2015)
8. Chao Zhang, Yu Zheng, XiuLi Ma, Jiawei Han, "Assembler: Efficient Discovery of Spatial Coevolving Patterns in Massive Geosensory Data", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’15), Sydney, Australia, Aug. 2015
9. Xiang Ren, Ahmed El-Kishky, Chi Wang, Fangbo Tao, Clare R. Voss, Heng Ji, Jiawei Han, "ClusType: Effective Entity Recognition and Typing by Relation Phrase-Based Clustering", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’15), Sydney, Australia, Aug. 2015
10. Fenglong Ma, Yaliang Li, Qi Li, Minghui Qui, Jing Gao, Shi Zhi, Lu Su, Bo Zhao, Heng Ji, and Jiawei Han, "FaitCrowd: Fine Grained Truth Discovery for Crowdsourced Data Aggregation", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’15), Sydney, Australia, Aug. 2015
11. Chi Wang, Xueqing Liu, Yanglei Song, Jiawei Han, "Towards Interactive Construction of Topical Hierarchy: A Recursive Tensor Decomposition Approach", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’15), Sydney, Australia, Aug. 2015
12. Yaliang Li, Qi Li, Jing Gao, Lu Su, Bo Zhao, Wei Fan, and Jiawei Han, "On the Discovery of Evolving Truth", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining and (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. Younghoo 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. Chao Zhang, Yangqiu Song, Yi Li, Ming Zhang, Dan Roth, Ming Zhang, Jiawei Han, "Incorporating World Knowledge to Document Clustering via Heterogeneous Information Networks", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’15), Sydney, Australia, Aug. 2015
16. Honglei Zhuang, Aditya Parameswaran, Dan Roth, Jiawei Han, "Debiasing Crowdsourced Batches", in Proc. of 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’15), Sydney, Australia, Aug. 2015
17. Xiang Ren, Ahmed El-Kishky, Chi Wang, and Jiawei Han, "Automatic Entity Recognition and Typing from Massive Text Corpora: A Phrase and Network Mining Approach" (conference tutorial), 2015 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’15), Sydney, Australia, Aug. 2015
18. Aston Zhang, Amit Goyal, Weize Kong, Hongbo Deng, Anlei Dong, Yi Chang, Carl A. Gunter, Jiawei Han, "adaQAC: Adaptive Query Auto-Completion via Implicit Negative Feedback", in Proc. of 2015 ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR’15), Santiago, Chile, Aug. 2015
19. Jiawei Han, Heng Ji, Yizhou Sun, "Successful Data Mining Methods for NLP", in Proc. 2015 Annual Meet. of the Association for Computational Linguistics and Int. Joint Conf. on Natural Language Processing of the Asian Federation of Natural Language Processing (ACL’15) (Tutorial Abstract), Beijing, China, July 2015, pp. 1-4.
20. Boliang Zhang, Hongzhao Huang, Xiaoman Pan, Sujian Li, Chin-Yew Lin, Heng Ji, Kevin Knight, Zhen Wen, Yizhou Sun, Jiawei Han, Bulent Yener, Context-aware Entity Morph Decoding, in Proc. 2015 Annual Meet. of the Association for Computational Linguistics and Int. Joint Conf. on Natural Language Processing of the Asian Federation of Natural Language Processing (ACL’15), Beijing, China, July 2015, pp. 586-595.

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

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

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

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

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

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

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

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

29. Jonathan Kuck, Honglei Zhuang, Xifeng Yan, Hasan Cam, and Jiawei Han, "Query-Based Outlier Detection in Heterogeneous Information Networks", in Proc. of 2015 Int. Conf. on Extending Database Technology (EDBT’15), Brussels, Belgium, Mar. 2015 (selected as one of the best papers in the conference and invited to journal ACM Transactions on Database 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 Tighness," IEEE Transactions on Knowledge and Data Engineering (TKDE), 27(6): 1478-1490, 2015

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

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

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

38. Jun Li, Qiming Qin, Jiawei Han, Lu An Tang, Kin Hou Lei, "Mining Trajectory Data and Geotagged Data in Social Media for Road Map Inference", Transactions in GIS (T. GIS) 19(1):1-18, 2015

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

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

2014

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

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

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

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

5. Quanquan Gu and Jiawei Han, "Online Spectral Learning on a Graph with Bandit Feedback", in Proc. of 2014 IEEE Int. Conf. on Data Mining (ICDM’14), Shenzhen, China, Dec. 2014.

6. Lu Su, Qi Li, Shaohan Hu, Shiguang Wang, Jing Gao, Hengchang Liu, Tarek Abdelzaher, Jiawei Han, Xue Liu, Yan Gao and Lance Kaplan, "Generalized Decision Aggregation in Distributed Sensing Systems", in Proc. of IEEE Real-Time Systems Symposium (RTSS’14), Rome, Italy, Dec. 2014.

7. Huan Gui, Yizhou Sun, Jiawei Han, and George Brova, "Modeling Topic Diffusion in Multi-Relational Bibliographic Information Networks", in Proc. of 2014 ACM Int. Conf. on Information and Knowledge Management (CIKM’14), Shanghai, China, Nov. 2014.
8. Hongbo Deng, Yizhou Sun, Yi Chang, and Jiawei Han, "Probabilistic Models for Classification", in Charu C. Aggarawal (ed.), Data Classification: Algorithms and Applications, pp. 65-86, CRC Press, 2014.
10. Jiawei Han, "Construction, Exploration, and Mining of Semi-Structured, Heterogeneous Information Networks", Tutorial at the 2014 Military Sensing Symposium (MSS) National Symp on Sensor Data Fusion (NSSDF), Springfield, VA, Oct. 2014.
11. Yingzhen Yang, Zhangyang Wang, Jianchao Yang, Jiawei Han, and Thomas S.Huang, "Regularized "1-Graph for Data Clustering", in Proc. of 2014 British Machine Vision Conference (BMVC’14), Nottingham, UK, Sept. 2014.
12. Chi Wang, Jianchao Yang, Xiangnan Kong, and Jiawei Han, "Scalable Moment-based Inference for Latent Dirichlet Allocation", in Proc. of 2014 European Conf. on Machine Learning and Principles and Practices of Knowledge Discovery in Databases (ECMLPKDD’14), Nancy, France, Sept. 2014.
13. Chao Zhang, Jiawei Han, Lidan Shou, Jiajun Lu, and Thomas La Porta, "Splitter: Mining Fine Grained Sequential Patterns in Semantic Trajectories", PVLDB 7(9): 769-780, 2014 (Also,in Proc. 2014 Int. Conf. on Very Large Data Bases (VLDB’14), Hangzhou, China, Sept. 2014.)
14. Dian Yu, Hongzhuo Huang, Taylor Cassidy, Heng Ji, Chi Wang, Shi Zhi, Jiawei Han and Clare Voss, "The Wisdom of Minority: Unsupervised Slot Filling Validation based on Multi-dimensional Truth-Finding with Multi-layer Linguistic Indicators", in Proc. of 2014 Int. Conf. on Computational Linguistics (Coling’14), Dublin, Ireland, Aug. 2014.
15. Xiang Ren, Jialu Liu, Xiao Yu, Urvashi Khandelwal, Quanquan Gu, Lidan Wang, and Jiawei Han, "ClusCite: Effective Citation Recommendation by Information Network-Based Clustering," in Proc. 2014 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’14), New York, NY, Aug. 2014.
16. Bo Zong, Yinghui Wu, Jie Song, Ambuj Singh, Hasan Cam, Jiawei Han, Xifeng Yan, "Towards Scalable Critical Alert Mining", in Proc. 2014 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’14), New York, NY, Aug. 2014.
17. Jiawei Han, Chi Wang, Ahmed El-Kishky, "Bringing Structure to Text: Mining Phrases, Entity Concepts, Topics, and Hierarchies", (conference paper), in Proc. of ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’14), New York, NY, Aug. 2014.
18. Quanquan Gu, Tong Zhang, Jiawei Han, "Batch-Mode Active Learning via Error Bound Minimization", in Proc. of 2014 Conf. on Uncertainty in Artificial Intelligence (UAI), Quebec City, Quebec, Canada, July 2014.
19. Chi Wang, Xueqiu Liu, Yanglei Song, Jiawei Han, "Scalable Moment-Based Learning for Topic Model", in Proc. 2014 ICML Workshop on Method of Moments and Spectral Learning (ICML-MMSL’14), Beijing, China, June 2014.
20. Hongbo Deng, Jiawei Han, Hao Li, Heng Ji, Hongning Wang, and Yue Lu, "Exploring and Inferring User-User Pseudo-Friendship for Sentiment Analysis with Heterogeneous Networks", accepted by Statistical Analysis and Data Mining, Feb. 2014.
21. Yijun Li, Quanquan Gu, Jack Poulson, 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. Peiyuan Yang, 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 (SIGMOD’14), Snowbird, UT, June 2014.
25. Fangbo Tao, Jiawei Han, Heng Ji, George Brova, Chi Wang, Brandon Norick, Ahmed El-Kishky, Jialu Liu, Xiang Ren, Yizhou Sun, "News NetExplorer: Automatic Construction and Exploration of News Information Networks", (system demo), in Proc. of 2014 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’14), Snowbird, UT, June 2014.
26. Jiawei Han and Chi Wang, "MiningLatent Entity Structures from Massive Unstructured and Interconnected Data", (Conference Tutorial), in Proc. of 2014 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’14), Snowbird, UT, June 2014.
27. Jiawei Han, "Construction and Mining of Heterogeneous Information Networks: Will It Be a Key to Web-Aged Information Management and Mining?" (keynote speech slides), in Proc. of 2014 Int. Conf. on Web-Age Information Management (WAIM’14), Macau, China, June 2014.
29. Marina Danilevsky, Chi Wang, Nihit Desai, Xiang Ren, Jingyi Guo, and Jiawei Han, "Automatic Construction and Ranking of Topical Keyphrases on Collections of Short Documents", in Proc. of 2014 SIAM Int. Conf. on Data Mining (SDM’14), Philadelphia, PA, April 2014.
30. Manish Gupta, Arun Mallya, Subhro Roy, Jason H. D. Cho, and Jiawei Han,"Local Learning for Mining Outlier Subgraphs from Network Datasets", in Proc. of 2014 SIAM Int. Conf.on Data Mining (SDM’14), Philadelphia, PA, April 2014.
31. Jingjing Wang, Changsung Kang, Yi Chang and Jiawei Han, "A Hierarchical Dirichlet Model for Taxonomy Expansion for Search Engines ", in Proc. of 2014 Int. Conf. World-Web Web Mining (WWW’14), Seoul, Korea, April 2014.
32. Lidan Wang, Jimmy Lin, Donald Metzler and Jiawei Han, "Learning to Efficiently Rank on Big Data", Tutorialat 2014 Int. World-Web Web Conf. (WWW’14), Seoul, Korea, April 2014.
33. Aston Zhang, Xing Xie, Kevin Chang, Carl Gunter, Jiawei Han and Xiaofeng Wang, "Privacy Risk in Anonymized Heterogeneous Information Networks", in Proc. of 2014 Int. Conf. on Extending Database Technology (EDBT’14), Athens, Greece, March 2014.
34. Manish Gupta, Jing Gao, Xifeng Yan, Hasan Cam, and Jiawei Han, "Top-K Interesting Subgraph Discovery in Information Networks", in Proc. of 2014 IEEE Int. Conf. on Data Engineering (ICDE’14), Chicago, IL, Mar. 2014.
35. Xiao Yu, Xiang Ren, Yizhou Sun, Quanquan Gu, Bradley Sturt, Urvashi Khandelwal, Brandon Norick, and Jiawei Han, "Personalized Entity Recommendation: A Heterogeneous Information Network Approach", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM’14), New York City, NY, Feb. 2014.
36. Xiao Yu, Hao Ma, Bo-June (Paul) Hsui 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, Yun Yan, Zheng Chen, and Jiawei Han, "Heterogeneous Graph-Based Intent Learning with Queries, Web Pages and Wikipedia Concepts", in Proc. 2014 ACM Int. Conf. on Web Search and Data Mining (WSDM’14), New York City, NY, Feb. 2014.
38. Chi Wang and Jiawei Han, "Role Discovery", to appear in the Encyclopedia of Social Networks and Mining (ESNAM), Springer Verlag, 2014.
39. Zhenhui Li and Jiawei Han, "Mining Periodicity from Dynamic and Incomplete Spatiotemporal Data", in Wesley W. Chu (ed.), Data Mining and Knowledge Discovery for Big Data, pp. 41-82, Springer, 2014.
40. Hongbo Deng and Jiawei Han, "Probabilistic Models for Clustering", in Charu C. Aggarawal and Chandan K. Reddy (eds.), Data Clustering: Algorithms and Applications, pp. 61-86, CRC Press, 2014.
2013

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

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

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

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

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

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


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

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

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

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

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

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

14. Tanvi Jindal, Prasanna Giridhar, Lu-An Tang, Jun Li, and Jiawei Han, "Spatiotemporal Periodical Pattern Mining in Traffic Data", in Proc. of 2013 ACM SIGKDD Int. Workshop on Urban Computing (UrbComp'13), Chicago, IL, Aug. 2013.

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

16. Quanquan Gu, Charu Aggarwal, Jialu Liu, and Jiawei Han, "Selective Sampling on Graphs for Classification", in Proc. of 2013 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'13), Chicago, IL, Aug. 2013, pp. 131-139.

17. Lu-An Tang, Xiao Yu, Quanquan Gu, Jiawei Han, Alice Leung, and Thomas La Porta, "Mining Lines in the Sand: On Trajectory Discovery From Untrustworthy Data in Cybez-Physical System", in Proc. of 2013 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'13), Chicago, IL, Aug. 2013, pp. 410-418. (selected as one of the best papers for publication in the special issue of selected papers in KDD 2013 in the journal "ACM Trans. on Knowledge Discovery from Data")

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

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

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

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

22. Jialu Liu, Chi Wang, Marina Danilevsky, and Jiawei Han, "Large-Scale Spectral Clustering on Graphs", in Proc. of 2013 Int. Joint Conf. on Artificial Intelligence (IJCAI'13), Beijing, China, Aug. 2013.

23. Jialu Liu and Jiawei Han, "HINMF: A Matrix Factorization Method for Clustering in Heterogeneous Information Networks", in Proc. of IJCAI-13 HINA workshop (UCAI-HINA'13), Beijing, China, Aug. 2013.

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

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

26. Fangbo Tao, Xiao Yu, Kin Hou Lei, George Brova, Xiao Cheng Jiawei Han, Ruchan Kanade, Yizhou Sun, Chi Wang, Lidan Wang, Tim Weninger, "Research-Insight: Providing Insight on Research by Publication Network Analysis", (system demo), in Proc. of 2013 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD’13), New York, NY, June 2013, pp. 1093-1096.
27. Jun Li, Qiming Qin, Jiawei Han, Lu-An Tang, and Kin Hou Lei, "Mining Trajectory Data and Geotagged Data in Social Media for Road Map Inference", in Proc. of 2013 UCGIS (University Consortium for Geographic Information Science) Symposium, Washington, USA, May, 2013.

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

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

30. Tim Wenering, Thomas J. Johnston, and Jiawei Han, "The Parallel Path Framework for Entity Discovery on the Web", ACM Transactions on the Web (TWEB) 13(1) (In Press).

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

32. Hongbo Deng, Jiawei Han, Hao Li, Heng Ji, Hongning Wang, and Yue Lu, "Exploring and Inferring User-User Pseudo-Friendship for Sentiment Analysis with Heterogeneous Networks", in Proc. of 2013 SIAM Data Mining Conf. (SDM'13), Austin, TX, May 2013, pp. 378-386. (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, Jialiu 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 Wenering 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, Dhiraj Joshi, and Jiawei Han, "Reinforced Similarity Integration in Image-Rich Information Networks", IEEE Transactions on Knowledge and Data Engineering (TKDE), 25(2):448-460, 2013.

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

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

46. Duo Zhang, ChengXiang Zhai, Jiawei Han: MiTexCube: MicroTextCluster Cube for online analysis of text cells and its applications. Data Mining 2013: 39-58

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

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

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

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

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

52. Tim Wenering, 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. Jialiu 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", SIKKDD Explorations, 14 (2):20-28, 2012.
2. Hyungsoo 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-Khatib, Latifur Khan, Churu Aggarwal, and Jiawei Han, "Recurring and Novel Class Detection using Class-Based Ensemble", in Proc. of 2012 IEEE Int. Conf. on Data Mining (ICDM’12), Brussels, Belgium, Dec. 2012.
5. Quanquan Gu and Jiawei Han, "Towards Active Learning on Graphs: An Error Bound Minimization Approach", in Proc. of 2012 IEEE Int. Conf. on Data Mining (ICDM’12), Brussels, Belgium, Dec. 2012.
6. Hongzhao Huang, Arkaiz Zubiaga, Heng Ji, Hongbo Deng, Dong Wang, Hieu Le, Tarek Abdelzaher, Jiawei Han, Alice Leung, John Hancock, and Clare Voss, "Tweet Ranking Based on Heterogeneous Networks", Proc of 2012 Int. Conf. on Computational Linguistics (COLING’12), Mumbai, India, Dec. 2012. pp. 1239-1256
7. Quanquan Gu, Tong Zhang, Chris Ding, and Jiawei Han, "Selective Labeling via Error Bound Minimization", in Proc. of 2012 Neural Information Processing Systems Conf. (NIPS’12), Lake Tahoe, NV, Dec. 2012.
8. Lu Su, Shaohan Hu, Shen Li, Feng Liang, Jing Gao, Tarek Abdelzaher, and Jiawei Han, "Quality of Information based Data Selection and Transmission in Wireless Sensor Networks", in Proc. of 2012 IEEE Real-Time Systems Symp. (RTSS’12), San Juan, Puerto Rico, Dec. 2012.
9. Xiong Liu, Kaizhi Tang, Jeffrey Hancock, Jiawei Han, Mitchell Song, Roger Xu, Vikram Manikonda, "SocialCUBE: A Text Cube Framework for Analyzing Social Media Data", in Proc. of 2102 A2E Int. Conf. on Social Informatics (Socialinformatics2012), Washington, D.C., Dec. 2012.
10. Duo Zhang, Chengxiang Zhai and Jiawei Han, "MiTexCube: MicroTextCluster Cube for Online Analysis of Text Cells and Its Applications", in Proc. of 2102 Int. Conf. on Social Informatics (Socialinformatics2012), DOI: 10.1007/978-3-642-33229-7_6.
11. Lu-An Tang, Yu Zheng, Jing Yuan, Jiawei Han, Alice Leung, Wen-Chih Peng, Thomas La Porta, and Lance Kaplan, "A Framework of Traveling Companion Discovery on Trajectory Data Streams", ACM Transactions on Intelligent Systems and Technology (ACM TIST), 2012.
12. Tim Weninger, Yonatan Bisk, and Jiawei Han, "Document-Topic Hierarchies from Document Graphs", in Proc. of 2012 Int. Conf. on Information and Knowledge Management (CIKM’12), Maui, Hawaii, Oct. 2012.
13. Xiao Yu, Yizhou Sun, Brandon Norick, Tiancheng Mao, and Jiawei Han, "User Guided Entity Similarity Search Using Meta-Path Selection in Heterogeneous Information Networks", in Proc. of 2012 Int. Conf. on Information and Knowledge Management (CIKM’12), Maui, Hawaii, Oct. 2012.
14. Cindy Xide Lin, Ming Ji, Marina Danilevsky, and Jiawei Han, "Efficient Mining of Correlated Sequential Patterns Based on Null Hypothesis", in Proc. of 2012 Int. Workshop on Web-Scale Knowledge Representation, Retrieval, and Reasoning (Web-KR 2012), co-located with 2012 Int. Conf. on Information and Knowledge Management (CIKM’12), Maui, Hawaii, Oct. 2012.
15. Manish Gupta, Jing Gao, ChengXiang Zhai, Jiawei Han, "Predicting Future Popularity Trend of Events in Microblogging Platforms", in Proc. of 75th Annual Meeting of American Society for Information Science & Technology (ASIS&T’12), Baltimore, MD, Oct. 2012 (slides)
16. Manish Gupta, Jing Gao, Yizhou Sun, and Jiawei Han, "Community Trend Outlier Detection Using Soft Temporal Pattern Mining", in Proc. of 2012 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD’12), Bristol, UK, Sept. 2012.
17. Taylor Cassidy, Heng Ji, Hongbo Deng, Jing Zheng, Jiawei Han, "Analysis and Refinement of Cross-lingual Entity Linking", in Proc. of 2012 Conf. and Labs of the Evaluation Forum on Information Access Evaluation meets Multilinguality, Multimodality, and Visual Analytics (CLEF’12), Rome, Italy, Sept. 2012.
18. Yizhou Sun, Jiawei Han, Xifeng Yan, and Philip S. Yu, "On the Power of Heterogeneous Information Networks" (conference tutorial), in Proc. of 2012 Int. Conf. on Advances in Social Network Analysis and Mining (ASONAM’12), Istanbul, Turkey, Aug. 2012.
19. Bo Zhao and Jiawei Han, "A Probabilistic Model for Estimating False Value Truth from Conflicting Sources", in Proc. of 10th Int. Workshop on Quality in Databases, in conjunction with VLDB 2012 (QDB’12), Istanbul, Turkey, Aug. 2012.
20. Yizhou Sun, Jiawei Han, Xifeng Yan, and Philip S. Yu, "Mining Knowledge from Interconnected Data: A Heterogeneous Information Network Analysis Approach" PVLDB 5(12): 2022-2023, 2012. (Conference tutorial at 2012 Int. Conf. on Very Large Data Bases (VLDB’12/PVLDB), Istanbul, Turkey, Aug. 2012.
21. Bo Zhao, Benjamin I. P. Rubinstein, Jim Gemmell, and Jiawei Han, "A Bayesian Approach to Discovering Truth from Conflicting Sources for Data Integration", in Proc. of 2012 Int. Conf. on Very Large Data Bases (VLDB’12/PVLDB), Istanbul, Turkey, Aug. 2012.
22. Yizhou Sun, Charu C. Aggarwal, and Jiawei Han, "Relation Strength-Aware Clustering of Heterogeneous Information Networks with Incomplete Attributes", in Proc. 2012 Int. Conf. on Very Large Data Bases (VLDB’12/PVLDB), Istanbul, Turkey, Aug. 2012.
23. Marina Barsky, Sangkyum Kim, Tim Weninger, and Jiawei Han, "Mining Flipping Correlations from Transactional Databases", in Proc. 2012 Int. Conf. on Very Large Data Bases (VLDB’12/PVLDB), Istanbul, Turkey, Aug. 2012.
24. Jiawei Han, "Construction of Web-Based, Service-Oriented Information Networks: A Data Mining Perspective" (keynote speech), in Proc. of 2012 Int. Conf. on Web-Age Information Management (WAIM’12), Harbin, China, Aug. 2012.
25. Manish Gupta, Jing Gao, Yizhou Sun, and Jiawei Han, "Integrating Community Matching and Outlier Detection for Mining Evolutionary Community Outliers", in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’12), Beijing, China, Aug. 2012.
26. Ming Ji, Binbin Lin, Xioafei He, Deng Cai, Jiawei Han, "Parallel Field Ranking", in Proc. of 2012 ACM SIGKDDInt. Conf. on Knowledge Discovery and Data Mining (KDD’12), Beijing, China. Aug. 2012 (KDD’12 Best Paper Award Candidate, Best Poster Award, invited to the special issue of ACM Transactions on KDD)
27. Zhenhui Li, Jingjing Wang, and Jiawei Han, "Mining Event Periodicity from Incomplete Observations", inProc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’12), Beijing, China, Aug. 2012.
28. Yizhou Sun, Brandon Norick, Jiawei Han, Xifeng Yan, Philip S. Yu, and Xiao Yu,"Integrating Meta-Path Selection with User Guided Object Clustering in Heterogeneous Information Networks", in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’12), Beijing, China, Aug. 2012 (KDD’12 Best Student Paper Award, invited to the special issue of ACM Transactions on KDD)
29. Xingjie Liu, Qi He, Yuanyuan Tian, Wang-Chien Lee, John McPherson, Jiawei Han, "Event-based Social Networks: Linking the Online and Offline Social Worlds", in Proc. of 2012 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’12), Beijing, China, Aug. 2012

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

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

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

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

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

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

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

37. Jianbin Huang, Heli 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 Social Networks in the Journal of Computer and System Sciences (JCSS), April 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. Mohammad M. Masud, Qing 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 Zhengyu Huang, "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. of 2012 Int. Conf. on World Wide Web (WWW’12), Lyon, France, Apr. 2012.

47. Chi Wang, Wei Chen, and Yajun Wang, "Scalable Influence 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, Alice Leung, Tarek Abdelzaher, and Lance Kaplan, "IntruMine: Mining Intruders in Untrustworthy Data of Cyber-Physical Systems", in Proc. 2012 SIAM Int. Conf. on Data Mining (SDM’12), Anaheim, CA, April 2012.

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

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

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

52. Zhijun Yin, Liangliang Cao, Quanquan Gu, and Jiawei Han, "A Probabilistic Model of Community-Based Latent Topic Analysis", ACM Transactions on Intelligent Systems and Technology (ACM TIST), 3(4), 2012, 63, doi: 10.1145/2337542.2337548

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. Radhika 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. Radhika 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, Xifei Yang, 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.
2011

61. Lu Liu, Jie Tang, 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

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

2. Jiawei Han, "Data Mining on Heterogeneous Information Networks" (slides), (keynote speech) at the 2011 Int. Conf. on Machine Learning Applications (ICMLA’11), Honolulu, Hawaii, Dec. 2011.

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

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

5. Cindy Xide Lin, Qiaozhu Mei, Jiawei Han, Yunliang Jiang, and Marina Danilevsksy, "The Joint Inference of Topic Diffusion and Evolution in Social Communities", in Proc. 2011 IEEE Int. Conf. on Data Mining (ICDM’11), Vancouver, Canada, Dec. 2011.

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

7. Jing Gao, Wei Fan, Deepak Turaga, Shrinivasan Parthasarathy, and Jiawei Han, "A Spectral Framework for Detecting Inconsistency across Multi-Source Object Relationships", in Proc. 2011 IEEE Int. Conf. on Data Mining (ICDM’11), Vancouver, Canada, Dec. 2011.

8. Mohammad Masud, Tahseen Al-Khteeb, Latifur Khan, Charu Aggarwal, Jing Gao, and Jiawei Han, "Detecting Recurring and Novel Concepts in Concept-Drifting Data Streams", in Proc. 2011 IEEE Int. Conf. on Data Mining (ICDM’11), Vancouver, Canada, Dec. 2011.

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

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

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

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

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

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

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

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

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


19. Jiawei Han, "Data Mining on Heterogeneous Information Networks", in Proc. of 2011 European Conf. on Machine Learning and Principles of Practice of Knowledge Discovery in Databases (ECMLPKDD’11), Athens, Greece, Sept. 2011

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

21. Jiawei Han, "Mining Data Semantics: An Information Network Analysis Approach" (slides), (keynote speech) The 2011 SIGKDD Workshop on Mining Data Semantics (MDS’11) associated with KDD’11 conference, San Diego, CA, Aug. 2011.

22. Hongbo Deng, Jiawei Han, Bo Zhao, Yintao Yu, Cindy Xide Lin, "Probabilistic Topic Models with Based Propagation on Heterogeneous Information Networks", in Proc. of 2011 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’11), San Diego, Aug. 2011.

23. Ming Ji, Jiawei Han, and Marina Danilevsksy, "Ranking-Based Classification of Heterogeneous Information Networks", in Proc. of 2011 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’11), San Diego, Aug. 2011.

24. Xin Jin, Chi Wang, Jiebo Luo, Xiao Yu and Jiawei Han, "LikeMiner: A System for Mining the Power of ‘Like’ in Social Media Networks", in Proc. of 2011 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD’11), (system demo), San Diego, Aug. 2011.

25. Cindy Xide Lin, Qiaozhu Mei, Yunliang Jiang, Jiawei Han, and Shanxiang Qi, "Inferring the Diffusion and Evolution of Topics in Social Communities", in Proc. of 2011 ACM SIGKDD Workshop on Social Network Mining and Analysis (SNACKD’11), San Diego, CA, Aug. 2011.

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

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

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

29. Ruoming Jin, Lin Lu, Bolin Ding, and Haixun Wang, "Distance Constraint Reachability Computation in Uncertain Graphs", accepted by PVLDB, 2011.
2010

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

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

3. Hei Sun, Jianbin Huang, Jiawei Han, Hongbo Deng, Peixiang Zhao, and Boqin Feng, "gSkeleton-Cliu: Density-based Network Clustering via Structure-Connected Tree Division or Aglomeration", in Proc. of 2010 Int. Conf. on Data Mining (ICDM’10), Sydney, Australia, Dec. 2010.

4. Mohammad Masud, Qing Chen, Latluf 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 NASA 2010 Conference on Intelligent Data Understanding (CIDU2010), Mountain View, CA, Oct. 2010.

6. Lu-An Tang, Xiao Yu, Sangkym Kim, Jiawei Han, Chih-Chieng 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, Asok 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. of 2010 ACM Int. Conf. on Information and Knowledge Management (CIKM’10), Toronto, Canada, Oct. 2010.

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

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

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

12. Xin Jin, Andrew Gallagher, Liangliang Cao, Jiebo Luo, and Jiawei Han, "The Wisdom of Social Multimedia: Using Flickr for Prediction and Forecast", in Proc. of 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. of 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, Sangkym Kim, Tim Weninger, Jiawei Han, and Tarek Abdelzaher, "NDPMine: Efficiently Mining Discriminative Numerical Features for Pattern-Based Classification", in Proc. of 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 Khavani Tharaisingham, "Classification and Novel Class Detection of 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 Weninger, 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 (MMDM'10), Washington D.C., July 2010.

21. Jiawei Han, "Mining Useful Patterns: An Evolutionary View", (Keynote Speech), in 2010 SIGKDD workshop on Useful Patterns (UP'10), Washington D.C., July 2010.

22. Zhenhui Li, Jie Tang, Jiawei Han, Manish Gupta, and Bo Zhao, "Community Evolution Detection in Dynamic Heterogeneous Information Networks", in Proc. 2010 KDD Workshop on Mining and Learning with Graphs (MLG'10), Washington D.C., July 2010.

23. Tim Weninger, Surya Ramachandran, Daniel Greene, Jack Hart, Anand Kancherlapalli, William H. Hsu, and Jiawei Han, "Speech-Assisted Radiology System for Retrieval, Reporting and Annotation", in Proc. 2010 ACM SIGKDD Conf. on Knowledge Discovery and Data Mining (KDD'10), (demo paper), Washington D.C., July 2010.

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

25. Zhenhui Li, Bolin Ding, 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 Xie 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 Publications", in Proc. 2010 ACM SIGKDDConf. on Knowledge Discovery and Data Mining (KDD'10), Washington D. C., July 2010.

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

29. Zhenhui Li, Ming Ji, Jiawei Han, and Roland Kays, "MoveMine: Mining Moving Object Databases" (system demo), in Proc. 2010 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'10), Indianapolis, Indiana, June 2010.

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

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

32. Cindy Xie 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. Jing Gao, Wei Fan, and Jiawei Han, "On the Power of Ensemble: Supervised and Unsupervised Methods Reconciled", Tutorial at the 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 Moinzadeh, Lili Wang, Yong Yang, Dong K. Noh, Tarek Abdelzaher, Carl A. Gunter, Jiawei Han, Xin Jin, "Diagnostic Powertracing for Sensor Node Failure Analysis", in Proc. 2010 Int. Conf. on Information Processing in Sensor Networks (IPSN'10), Stockholm, Sweden, April 2010.

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

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

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

39. Zhenhui Li, Bing Liu, and Jiawei Han, "Keyword Extraction for Social Snippets", in Proc. 2010 Int. World Wide Web Conf. (WWW'10), Raleigh, NC, April 2010. (poster paper)

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

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

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

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

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

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

46. Zhenhui Li, Jie-Gil Lee, Xifeng Yan, 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 Data Base Technology (EDBT'10), Lausanne, Switzerland, March 2010.
2009

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

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

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

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

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

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

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

8. 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.

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

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

11. Mohammad Masud, Jing Gao, 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, Chindy Xide Lin, Matt Fredriksson, Mihai Cristodorescu, Xifeng Yan, and Jiawei Han, "Mining Graph Patterns Efficiently via Randomized Summaries", in Proc. 2009 Int. Conf. on Very Large Data Bases (VLDB'09), Lyon, France, Aug. 2009.

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

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

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

17. Zhiqun Yin, Rui Li, Qiaozhu Mei, and Jiawei Han, "Examining 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. Jiwen Yuan, Feida Zhu, Meng Jiang, Jiawei Han, and Yintao Yu, "Locality Preserving Nonnegative Matrix Factorization", in Proc. 2009 Int. Joint Conf. on Arti_cial Intelligence(UJAIC-09), Pasadena, CA, July 2009.

19. Mohammad Nafi Hasan Khan, Tarek Abdelzaher, Jaewi 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.

20. Mohammad Nafi Hasan Khan, Healfeng Chen, and Jiawei Han, "Modelling 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, Xifeng 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 Data Base Technology (EDBT'09), Saint-Petersburg, Russia, Mar. 2009.

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

28. Chelin 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. Chelin Ding, 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 (KAISS), 2009.


2008

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

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

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

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

5. Mohammad Masud, Jing Gao, Latifur Khan, Jiawei Han, and Bhavani Thuraisingham, "A Practical Approach to 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 Malifi Hasan Khan, Hieu Le, Hossein Ahmadi, Tarek Abdelzaher, and Jiawei Han, "DustMiner: Troubleshooting Interactive Complexity Bugs in Sensor Networks", in Proc. 2008 ACM Int. Conf. on Embedded Networked Sensor Systems (SenSys'08), Raleigh, NC, Nov. 2008.

8. Chen Chen, Cindy Xide Lin, Xiaofeng 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. Jie-Gil Lee, Jiawei Han, Xiaolei Li, and Hector Gonzalez, "TraClas: Trajectory Classification Using Hierarchical Region-Based and Trajectory-Based Clustering", in Proc. 2008 Int. Conf. on Very Large Data Base (VLDB'08), Auckland, New Zealand, Aug. 2008.

11. Wei Fan, Kun Zhang, Hong Cheng, Jing Gao, Xifeng Yan, Jiawei Han, Philip S. Yu, and Olivier Verscheure, "Direct Mining of Discriminative and Essential Graphical and Itemset Features via Model-based Search Tree", in Proc. 2008 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'08), Las Vegas, NV, Aug. 2008.

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

13. Bin Jiang, Jian Pei, Xuemlin 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, Younheo Ko, Seungh-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, Jie-Gil Lee, and Yizhou Sun, "Sampling Cube: A Framework for Statistical OLAP over Sampling Data", in Proc. 2008 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'08), Vancouver, BC, Canada, June 2008.

19. Yizhou Sun, Tianyi Wu, Hong Cheng, Jiawei Han, Xiaoxin Yin, and Peixiang Zhao, "BibNetMiner: Mining Bibliographic Information Network", (demo paper), in Proc. 2008 ACM SIGMOD Int. Conf. on Management of Data (SIGMOD'08), Vancouver, BC, Canada, June 2008.
<table>
<thead>
<tr>
<th>Year</th>
<th>Authors</th>
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<th>Conference</th>
<th>Year</th>
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<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, Wei Vivian Zhang, and Jiawei Han</td>
<td>&quot;Regularized Locality Preserving Indexing&quot;</td>
<td>Proc. 2007 ACM Int. Conf. on Information and Knowledge Management (CIKM'07), Lisbon, Portugal, Nov. 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;A Unified Approach for Sparse Subspace Learning&quot;</td>
<td>Proc. 2007 ACM Int. Conf. on Multimedia (ACM-MM'07), Augsburg, Germany, Sept. 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;Association Mining in Large Databases: A Re-Examination of Its Measures&quot;</td>
<td>Proc. 2007 Int. Conf. on Principles and Practice of Knowledge Discovery in Databases (PKDD'07), Warsaw, Poland, Sept. 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;Making Subspace Mining Results More Trustworthy&quot;</td>
<td>Proc. 2007 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'07), San Jose, CA, Aug. 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;Traffic Density-based Discovery of Hot Routes in Road Networks&quot;</td>
<td>Proc. 2007 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'07), San Jose, CA, Aug. 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;Isometric Projection&quot;</td>
<td>Proc. 2007 Int. Conf. on Scientific and Statistical Database Management (SSDBM'07), Banff, Canada, July 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;Efficient Processing of Subspace Skyline Queries on High Dimensional Data&quot;</td>
<td>Proc. 2007 Int. Conf. on Scientific and Statistical Database Management (SSDBM'07), Banff, Canada, July 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;On Efficient Processing of Subspace Skyline Queries on High Dimensional Data&quot;</td>
<td>Proc. 2007 Int. Conf. on Scientific and Statistical Database Management (SSDBM'07), Banff, Canada, July 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;Efficient Parameterization of Subspace Skyline Queries for Multi-Versional Data Mining&quot;</td>
<td>Proc. 2007 ACM SIGKDD Int. Conf. on Management of Data (SIGMOD'07), Beijing, China, June 2007.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;Learning a Maximum Margin Subspace for Image Retrieval&quot;</td>
<td>IEEE Transactions on Knowledge and Data Engineering, 20(2):189-201, 2008.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;P-Cube: Answering Preference Queries in Multi-Dimensional Space&quot;</td>
<td>Proc. 2008 Int. Conf. on Data Engineering (ICDE'08), Cancun, Mexico, April 2008.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;SRDA: An Efficient Algorithm for Large Scale Discriminant Analysis&quot;</td>
<td>IEEE Transactions on Knowledge and Data Engineering, 20(1):1-12, 2008.</td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>Deng Cai, Xiaofei He, and Jiawei Han</td>
<td>&quot;Approximate Frequent Itemset Mining In the Presence of Random Noise&quot;</td>
<td>O. Maimon and L. Rokach (eds.), Soft Computing for Knowledge Discovery and Data Mining, Springer, 2008, pp. 363-389.</td>
<td></td>
</tr>
</tbody>
</table>
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, Jiawei Han, and Wei Wang, "Ranking Outliers Using Symmetric Neighborhood Relationship," in Proc. 2006 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD’06), Singapore, April 2006.

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

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

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

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

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

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

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


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

28. Jianyong Wang, Jiawei Han, and Jian Pei, "Closed Constrained-Gradient Mining in Retail Databases", IEEE Transactions on Knowledge and Data Engineering, 18(6): 764-789, 2006.

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

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

2005

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

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

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

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

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

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


11. D. Xin, J. Han, X. Yan and H. Cheng, "Mining Compressed Frequent-Set Patterns", 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. Han, Y. Lu, and P. Tzvetkov, "Mining Closed Relations in Graph Databases", in Proc. 2005 Int. Conf. on Knowledge Discovery and Data Mining (KDD’05), Chicago, IL, Aug. 2005.

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

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

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

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

18. H. Hu, X. Yan, Yu. J. Han and X. J. Zhou, "Mining Coherent Dense Subgraphs across Massive Biological Networks for Functional Discovery", in Proc. 2005 Int. Conf. on Intelligent Systems for Molecular Biology (ISM’05), Ann Arbor, MI, June 2005.

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

20. C. Liu, X. Yan, H. Yu, J. Han, and P. S. Yu, "Mining Behavior Graphs for Backtrace of Noncrashing Bugs", in Proc. 2005 SIAM Int. Conf. on Data Mining (SDM’05), Newport Beach, CA, April 2005.
21. H. Cheng, X. Yan, and J. Han, "SeqIndex: Indexing Sequences by Sequential Pattern Analysis", in Proc. 2005 SIAM Int. Conf. on Data Mining (SDM'05), Newport Beach, CA, April 2005.

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

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


25. J. Yang, X. Yan, J. Han, and W. Wang, "Discovering Evolutionary Classifier over High Speed Non-static Stream," in S. Bandypadhyay et al. (eds.), Advanced Methods for KnowledgeDiscovery 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 Discovery, 11(3): 295-321, 2005.

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

28. Xileng Yan, Philip Yu, and Jiawei Han, "Graph Indexing Based on Discriminative Frequent Structure Analysis", ACM Transactions on Knowledge and Data Engineering, 17(12):1624-1637, 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, Xileng Yan, Jiawei Han, "TSP: Mining top-k closed sequential patterns", Knowl. Inf. Syst., 7(4): 438-457, 2005.


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

2004

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

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

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

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

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

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

7. 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 (PAKDD'04), Sydney, Australia, May 2004.

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

18. D. Yang, B. He, J. Han, L. M. Gravano, and W. Z. Zhang, "Discovering Sequential Patterns in Web Logs", IEEE Transactions on Knowledge and Data Engineering, 16(6), 2004.

19. K. Wang, Y. Jiang, J. X. Yu, G. Dong, and J. Han, "Clustering Moving Objects", 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.


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


2003


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

3. C. Aggarwal, J. Han, J. Wang, and P. S. Yu, "A Framework for Clustering Evolving Data Streams", Proc. 2003 Int. Conf. on Very Large Data Bases (VLDB'03), Berlin, Germany, Sept. 2003.

4. J. Han, R. B. Altman, V. Kumar, H. Mannila and D. Pregibon, "Emerging Scientific Applications in Data Mining", Communications of ACM, 45(8):54-58, 2002.

5. D. Xin, J. Han, X. Li, and B. W. Wah, "Star-Cubing: Computing Iceberg Cubes by Top-Down and Bottom-Up Integration", in Proc. 2003 Int. Conf. on Very Large Data Bases (VLDB'03), Berlin, Germany, Sept. 2003.

6. X. Yan and J. Han, "CloseGraph: Mining Closed Frequent Graph Patterns", in Proc. 2003 ACM SIGKDD Int.Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.

7. H. Yu, J. Yang, and J. Han, "Classifying Large Data Sets Using SVM with Hierarchical Clusters", in Proc. 2003 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.

8. J. Wang, J. Han, and J. Pei, "CLOSE+: Searching for the Best Strategies for Mining Frequent Closed Itemsets", in Proc. 2003 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.

9. H. Wang, W. Fan, P. S. Yu, and J. Han, "Mining Concept-Drifting Data Streams using Ensemble Classifiers", in Proc. 2003 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'03), Washington, D.C., Aug. 2003.

10. C. Giannella, J. Han, 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, Jianyong Wang, Ying Lu, and Peter Tzvetkov, "Mining Top-K Frequent Closed Patterns without Minimum Support", in Proc. 2002 Int. Conf. on Data Mining (ICDM’02), Maebashi, Japan, Dec. 2002.

2. Jian Pei, Guozhu Dong, Wei Zou, and Jiawei Han, "On Computing Condensed Frequent Pattern Bases", in Proc. 2002 Int. Conf. on Data Mining (ICDM’02), Maebashi, Japan, Dec. 2002.

3. Xifeng Yan and Jiawei Han, "gSpan: Graph-Based Substructure Pattern Mining", in Proc. 2002 Int. Conf. on Data Mining (ICDM’02), Maebashi, Japan, Dec. 2002. (10-Year Highest Impact Paper Award)

4. Hwanjo Yu, Kevin C. C. Chang, and Jiawei Han, "Heterogeneous Learner for Web Page Classification", in Proc. 2002 Int. Conf. on Data Mining (ICDM’02), Maebashi, Japan, Dec. 2002.

5. Jiawei Han, and Kevin C.-C. Chang, "Data Mining for Web Intelligence", Computer, Nov. 2002.

6. Jian Pei, Jiawei Han, and Wei Wang, "Mining Sequential Patterns with Constraints in Large Databases", in Proc. 2002 Int. Conf. on Information and Knowledge Management (CIKM’02), Washington, D.C., Nov. 2001.

7. Yixin Chen, Guozhu Dong, Jiawei Han, Benjamin W. Wah, and Jianyong Wang, "Multi-Dimensional Regression Analysis of Time-Series Data Streams", in Proc. 2002 Int. Conf. on Very Large Data Bases (VLDB’02), Hong Kong, China, Aug. 2002.

8. Laks V. S. Lakshmanan, Jian Pei, and Jiawei Han, "Quotient Cube: How to Summarize the Semantics of a Data Cube", in Proc. 2002 Int. Conf. on Very Large Data Bases (VLDB’02), Hong Kong, China, Aug. 2002.

9. Hwanjo Yu, Jiawei Han, and Kevin C.-C. Chang, "PEBL: Positive Example Based Learning for Web Page Classification Using SVM", in Proc. 2002 Int. Conf. on Knowledge Discovery in Databases (KDD’02), Edmonton, Canada, July 2002.

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

11. J. Han, "How Can Data Mining Help Bio-Data Analysis?", in Proc. 2002 Workshop on Data Mining in Bioinformatics (with SIGKDD’02 Conf. (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.
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: High-Structure Mining of Frequent Patterns in Large Databases," in Proc. 2001 Int. Conf. on Data Mining (ICDM'01), San Jose, CA, Nov. 2001.

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


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

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

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

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

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

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

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

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

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

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

2000

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


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

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

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

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

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

9. J. Han, J. Pei, and Y. Yin, "Mining Frequent Patterns without Candidate Generation (PDF)," in Proc. 2000 ACM-SIGMOD Int. Conf. on Management of Data (SIGMOD'00), Dallas, TX, May 2000.

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

11. J. Pei, J. Han, B. Mortazavi-Asl, and H. Zhu, "Mining Access Patterns Efficiently from Web Logs (PDF)," in Proc. 2000 Pacific-Asia Conf. on Knowledge Discovery and Data Mining (PAKDD'00), Kyoto, Japan, April 2000. (10-Year Most Influential Paper Award)

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

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

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