Research Publications - Data Mining Research Group at CS, UIUC

2019

1. Shuochoa Yao, Ailing Piao, Wenjun Jiang, Yiran Zhao, Huajie Shao, Shengzhong Liu, Dongxin Liu, Jinyang Li, TianShi Wang, ShaoHAN Hu, Lu Su, Jiawei Han and Tarek Abdelzaher, “STF-Nets: Learning Sensing Signals from the Time-Frequency Perspective Using Short-Time Fourier Neural Networks”, in Proc. the Web Conf. 2019 (WWW'19), San Francisco, CA, May 2019
2. Carl Yang, Huy Hoang Do, Tomas Mikolov and Jiawei Han “Place Deduplication with Embeddings”, in Proc. the Web Conf. 2019 (WWW'19), San Francisco, CA, May 2019
3. Honglei Zhuang, Timothy Hanratty, and Jiawei Han, “Aspect-Based Sentiment Analysis with Minimal Guidance”, in Proc. 2019 SIAM Int. Conf. on Data Mining (SDM'19), Calgary, Alberta, Canada, May 2019
4. Sha Li, Chao Zhang, Dongming Lei, Ji Li, Jiawei Han, “GeoAttn: Fine-Grained Localization of Social Media Messages via Attentional Memory Network”, in Proc. 2019 SIAM Int. Conf. on Data Mining (SDM'19), Calgary, Alberta, Canada, May 2019
5. Qi Zhu, Xiang Ren, Jingbo Shang, Yu Zhang, Ahmed El-Kishky and Jiawei Han. “Integrating Local Context and Global Cohesiveness for Open Information Extraction”, in Proc. 2019 ACM Int. Conf. on Web Search and Data Mining (WSDM'19), Melbourne, Australia, Feb. 2019
6. Jiaming Shen, Ruiiliang Lyu, Xiang Ren, Michelle Vanni, Brian Sadler, Jiawei Han, “Mining Entity Synonyms with Efficient Neural Set Generation”, in Proc. 2019 AAAI Conf. on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, Jan. 2019
7. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, “Weakly-Supervised Hierarchical Text Classification”, in Proc. 2019 AAAI Conf. on Artificial Intelligence (AAAI-19), Honolulu, Hawaii, Jan. 2019
8. Xuan Wang, Yu Zhang, Xiang Ren, Yuhao Zhang, Marinka Zitnik, Jingbo Shang, Curtis Langlotz, and Jiawei Han, “Cross-type Biomedical Named Entity Recognition with Deep Multi-Task Learning”, Bioinformatics (accepted), Oct. 2018 (to appear 2019)

2018

1. Xiang Ren and Jiawei Han, Mining Structures of Factual Knowledge from Text: An Effort-Light Approach, Morgan & Claypool Publishers, 2018. (Ren's thesis: 2018 ACM SIGKDD Dissertation Award)
2. Jingbo Shang, Jialu Liu, Meng Jiang, Xiang Ren, Clare R Voss, Jiawei Han, “Automated Phrase Mining from Massive Text Corpora”, IEEE Transactions on Knowledge and Data Engineering, 30(10):1825-1837 (2018)
3. Jingbo Shang, Meng Jiang, Wenzhu Tong, Jinfeng Xiao, Jian Peng, Jiawei Han. “DPPred: An Effective Prediction Framework with Concise Discriminative Patterns”, IEEE Transactions on Knowledge and Data Engineering, 30(7): 1226-1239 (2018)
4. Chenguang Wang, Yangqiu Song, Haoran Li, Ming Zhang, Jiawei Han, “Unsupervised meta-path selection for text similarity measurement based on heterogeneous information networks”, Data Mining and Knowledge Discovery, 32(6): 1735-1767 (2018)
5. Chao Zhang, Dongming Lei, Qian Yuan, Honglei Zhuang, Lance M. Kaplan, 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, Jianyang Wang, Xiaojie Wang, Zhenguo 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-Windows 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, Zheiyi 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, Xiushi Chen, Meng Jiang, Tim Hanratty, Lance Kaplan, and Jiawei Han, “Doc2Cube: Allocating Documents to Text Cube without Labeled Data”, in Proc of 2018 IEEE Int. Conf. on Data Mining (ICDM’18), Singapore, Nov. 2018
12. Doris Xin, Ahmed El-Kishky, De Liao, Brandon Norick, and Jiawei Han, “Active Learning on Heterogeneous Information Networks: A Multi-armed Bandit Approach”, in Proc of 2018 IEEE Int. Conf. on Data Mining (ICDM’18), Singapore, Nov. 2018
13. Jingbo Shang, Liyan 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. Liyan Liu, Xiang Ren, Jingbo Shang, Xiaotao Gu, Jian Peng and Jiawei Han, “Efficient Contextualized Representation: Language Model Pruning for Sequence Labeling”, in Proc of 2018 Conf. on Empirical Methods in Natural Language Processing (EMNLP’18), Brussels, Belgium, Oct. 2018
15. Quan Yuan, Xiang Ren, Wenqi He, Chao Zhang, Xinhe Geng, Lifu Huang, Heng Ji, Chin-Yew Lin and Jiawei Han, “Open-schema Event Profiling for Massive News Corpora”, in Proc of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM’18), Turin, Italy, Oct. 2018
16. Yu Meng, Jiaming Shen, Chao Zhang and Jiawei Han, “Weakly-Supervised Neural Text Classification”, in Proc of 2018 ACM Int. Conf. on Information and Knowledge Management (CIKM’18), Turin, Italy, Oct. 2018
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 AutoPath Matching", in Proc. of 2018 European Conf. on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECMLPKDD'18), Dublin, Ireland, Sept. 2018

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

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

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

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

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

24. Hanwen Zha, Jiaming Shen, Keqian Li, Warren Greiff, Michelle Vanni, Jiawei Han and Xifeng Yan, "FTS: Faceted Taxonomy Construction and Search for Scientific Publications", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'18), (demo paper), London, UK, August 2018

25. Carl Yang, Xiaolin Shi, Jie Luo and Jiawei Han, "I Know You’ll Be Back: Interpretable New User Clustering and Churn Prediction on a Mobile Social Application", in Proc. of 2018 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'18), London, UK, August 2018

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

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

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

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

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

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

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

33. 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)

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

35. Liuyuan Liu, Jingbo Shang, Frank Xu, Xiang Ren, Huan Gui, Jian Peng and Jiawei Han, "Empower Sequence Labeling with Task-Aware Neural Language Model", in Proc. of 2018 AAAI Conf. on Artificial Intelligence (AAA’18), New Orleans, LA, Feb. 2018

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

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

38. 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

39. 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

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

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

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

5. Shi Zhi, Yichen Sun, Chao Zhang, "ClaimVerif: A Real-time Claim Verification System Using the Web and Fact Databases", in Proc. of 2017 ACM Int. Conf. on Information and Knowledge Management (CIKM'17), Singapore, Nov. 2017

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

7. Huan Gai, Jialiu Liu, Fangbo Tao, Meng Jiang, Brandon Norick, Lance Kaplan and Jiawei Han, "Embedding Learning with Events in Heterogeneous Information Networks", IEEE Transactions on Knowledge and Data Engineering, 29(11): 2429-2441, 2017

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

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

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

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

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

13. Meng Qu, Jiawei Ren and Jiawei Han, "Double Event Extraction with Relation Graphs", in Proc. of 2017 ACM SIGKDD Int. Conf. on Knowledge Discovery and Data Mining (KDD'17), Halifax, Nova Scotia, Canada, Aug. 2017

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

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

16. Meng Qu, Jian Tang, Jingbo Shang, Quan Yuan, Tim Hanratty, Shaowen Wang and Jiawei Han, "ReAct: Online Multimodal Embedding for Recency-Aware Spatiotemporal Activity Modeling", in Proc. of 2017 ACM SIGIR Conf. on Research & Development in Information Retrieval (SIGIR'17), Tokyo, Japan, Aug. 2017

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

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

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

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

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

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


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

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

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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.

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30. Wenjun Jiang, Chenglin Miao, Lu Su, Qi Li, Shaochan Hu, Shiguang Wang, Jing Gao, Hengchang Liu, Tarek F. Abdelzaher, Jiawei Han, Xue Liu, Yan Gao, and Lance Kaplan, "Towards Quality Aware Information Integration in Distributed Sensing Systems", in IEEE Transactions on Parallel and Distributed Systems, 2017.
1. Huan Gui, Jialu Liu, Fangbo Tao, Meng Jiang, Brandon T. Norick, and Jiawei Han, "Large-Scale Embedding Learning in Heterogeneous Event Data", in Proc. of 2016 Int. Conf. on Data Mining (ICDM'16), Barcelona, Spain, Dec. 2016.
2. Xiang Ren, Wenqi He, Meng Qu, Lilu Huang, Heng Ji, and Jiawei Han, "AFET: Automatic Fine-Grained Entity Typing by Hierarchical Partial-Label Embedding", in Proc. of 2016 Conf. on Empirical Methods in Natural Language Processing (EMNLP'16), Austin, TX, Nov. 2016
3. Meng Jiang, Peng Cui, and Jiawei Han, "Data-Driven Behavioral Analytics: Observations, Representations and Models", in Proc. of 2016 ACM Int. Conf. on Information and Knowledge Management (CIKM'16) (conference tutorial), Indianapolis, IN, Oct. 2016
4. Tarique Siddiqui, Xiang Ren, Aditya Parameswaran and Jiawei Han, "FacetGist : Collective Extraction of Document Facets in Large Technical Corpora", in Proc. of 2016 ACM Int. Conf. on Information and Knowledge Management (CIKM'16), Indianapolis, IN, Oct. 2016
5. Hongkun Yu, Jingbo Shang, Meichun Hsu, Malú Castellanos and Jiawei Han, "Data-Driven Contextual Valence Shifter Quantification for Multi-Theme Sentiment Analysis", in Proc. of 2016 ACM Int. Conf. on Information and Knowledge Management (CIKM'16), Indianapolis, IN, Oct. 2016
6. Qian Cheng, Jingbo Shang, Joshua Juen, Jiawei Han and Bruce Schatz, "Mining Discriminative Patterns to Predict Health Status for Cardiopulmonary Patients", in Proc. of 2016 ACM Conf. on Bioinformatics, Computational Biology, and Health Informatics (ACMB-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, tongtiao Zhang, Dongang Wang, Hongzhi Li, Taylor Cassidy, Heng Ji, Shih-Fu Chang, Jiawei Han, William Wallace, James Hendler, Mei Si and Lance Kaplan, "Cross-media Event Extraction and Recommendation", in Proc. of 2016 Annual Conf. of the North American Chapter of the Association for Computational Linguistics (NAACL), 2016. [Demo System]
9. Huan Gui, Haishan Liu, Xiangrui Meng, Anmol Bhasin, Jiawei Han, "Downsize Management in Recommender Systems", in Proc. of 2016 IEEE/ACM Int. Conf. on Advances in Social Networks Analysis and Mining (ASONAM'16), San Francisco, CA, Aug. 2016
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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
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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
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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
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