

XIANG (TOMMY) YUE

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EDUCATION

Ph.D Student	Department of Computer Science and Engineering(CSE), The Ohio State University (OSU), USA Advisor: Prof. Huan Sun	2018-present
B.Eng.	School of Computer Science, Wuhan University (WHU), China GPA: 3.79/4.0, Rank: top 1%, Outstanding Graduates Advisor: Prof. Wen Zhang <i>Thesis: Drug-disease associations mining and study (in Chinese)</i> <i>(Excellent Graduation Thesis Award, top 5%)</i>	2014-2018

RESEARCH INTERESTS

- Natural Language Processing: Question Answering, Clinical NLP, Natural Language Generation
- Data Mining: Graph Embedding, Graph Mining, Bioinformatics

SELECTED PUBLICATIONS

([Google Scholar](#)) ([Semantic Scholar](#))

* indicates equal contributions

NLP (Question Answering, Clinical NLP, Natural Language Generation):

- [1] **Xiang Yue** and Shuang Zhou, "PHICON: Improving Generalization of Clinical Text De-identification Models via Data Augmentation", *EMNLP 2020 Clinical Natural Language Processing Workshop*
- [2] **Xiang Yue**, Bernal Jimenez Gutierrez and Huan Sun, "Clinical Reading Comprehension: A Thorough Analysis of the emrQA Dataset", *The 58th Annual Meeting of the Association for Computational Linguistics (ACL 2020, long paper)*
- [3] **Xiang Yue***, Xinliang (Frederick) Zhang*, Ziyu Yao, Simon Lin and Huan Sun, "CliniQG4QA: Generating Diverse Questions to Improve Clinical Reading Comprehension on New Contexts", *under review*
- [4] Bernhard Kratzwald, **Xiang Yue**, Huan Sun and Stefan Feuerriegel, "Practical Annotation Strategies for Question Answering Datasets ", *arXiv preprint*

Data Mining (Graph Embedding, Graph Mining, Bioinformatics)

- [5] **Xiang Yue**, Zhen Wang, Jingong Huang, Srinivasan Parthasarathy, Soheil Moosavinasab, Yungui Huang, Simon Lin, Wen Zhang, Ping Zhang and Huan Sun, "Graph Embedding on Biomedical Networks: Methods, Applications, and Evaluations", *Bioinformatics*, 2020 (Impact Factor: 4.531) (**ESI Highly Cited Paper: top 1% cited paper of its academic field**)
- [6] Feng Huang*, **Xiang Yue***, Zhankun Xiong, Zhouxin Yu, Shichao Liu and Wen Zhang, "Tensor decomposition with relational constraints for predicting multiple types of microRNA-disease associations", *Briefings in Bioinformatics*, 2020 (Impact Factor: 8.990)
- [7] Zhen Wang, **Xiang Yue**, Soheil Moosavinasab, Yungui Huang, Simon Lin and Huan Sun, "Surf-Con: Synonym Discovery on Privacy-Aware Clinical Data", *The 25th ACM SIGKDD Conference on Knowledge Discovery and Data Mining 2019 (KDD 2019, research track, oral)*

- [8] Wen Zhang, **Xiang Yue**, Guifeng Tang, Wenjian Wu, Feng Huang, Xining Zhang , "SFPEL-LPI: Sequence-based Feature Projection Ensemble Learning for Predicting LncRNA-Protein Interactions", *PLOS Computational Biology*, Dec 2018
- [9] Wen Zhang, **Xiang Yue**, Weiran Lin, Wenjian Wu, Ruoqi Liu, Feng Huang, Feng Liu , "Predicting drug-disease associations by using similarity constrained matrix factorization", *BMC Bioinformatics*, June 2018
- [10] Wen Zhang, **Xiang Yue**, Feng Huang, Ruoqi Liu, Yanlin Chen, Feng Huang, Chunyang Ruan, "Predicting drug-disease associations and their therapeutic function based on the drug-disease association bipartite network", *Methods*, June 2018
- [11] Guangsheng Wu, Juan Liu and **Xiang Yue**, "Prediction of drug-disease associations based on ensemble meta paths and singular value decomposition", *BMC Bioinformatics*, Dec 2018
- [12] Wen Zhang, Feng Huang, **Xiang Yue**, Xiaoting Lu, Weitai Yang, Zhishuai Li, and Feng Liu , "Prediction of drug-disease associations and their effects by signed network-based nonnegative matrix factorization", *IEEE International Conference on Bioinformatics and Biomedicine 2018 (BIBM 2018)*, Dec 2018
- [13] Guifeng Tang, Jingwen Shi, Wenjian Wu, **Xiang Yue**, Wen Zhang , "Sequence-based bacterial small RNAs prediction using ensemble learning strategies", *IEEE International Conference on Bioinformatics and Biomedicine 2017 (BIBM 2017)*, Dec 2018
- [14] Wen Zhang, Yanlin Chen, Dingfang Li, **Xiang Yue** , "Manifold regularized matrix factorization for drug-drug interaction prediction", *Journal of Biomedical Informatics*, Nov 2018
- [15] Wen Zhang, **Xiang Yue**, Feng Liu, Yanlin Chen, Shikui Tu, Qianlong Qu, Xining Zhang, "A unified frame of predicting side effects of drugs by using linear neighborhood similarity", *BMC Systems Biology*, Dec. 2017
- [16] Wen Zhang, **Xiang Yue**, Yanlin Chen, Weiran Lin, Bolin Li, Feng Liu, Xiaohong Li, "Predicting drug-disease associations based on the known association bipartite network" *IEEE International Conference on Bioinformatics and Biomedicine 2017 (BIBM 2017)*
- [17] Wen Zhang, Jingwen Shi, Guifeng Tang, Wenjian Wu, **Xiang Yue**, Dingfang Li, "Predicting small RNAs in bacteria via sequence learning ensemble method" *IEEE International Conference on Bioinformatics and Biomedicine 2017 (BIBM 2017)*

ACADEMIC SERVICES

- Program Committee/Reviewer:
 - IEEE Transactions on Knowledge and Data Engineering (TKDE)
 - IEEE Transactions on Neural Networks and Learning Systems
 - Bioinformatics
 - Nature Scientific Reports
 - ACM Transactions on Computing for Healthcare
 - BMC Medical Informatics and Decision Making
 - AMIA 2020
 - BIBM 2018, 2020
- External/Secondary Reviewer: KDD 2020,2019, Neurocomputing, BMC Bioinformatics, BMC Systems Biology

HONORS & AWARDS

- KDD 2019 Student Travel Award *Aug 2019*
- Excellent Graduation Thesis Award of WHU (Scale: 5%) *June 2018*
- Outstanding Graduates of WHU (Scale: 10%) *May 2018*
- LEI JUN Scholarship (Scale: Top 1 Winner of National Scholarship, the highest prize for students in WHU) *2016-2017*
- First Class Scholarship (Scale: 5%), Three Times, WHU *2014-2017*
- Excellent Student (Scale: 5%), Three Times, WHU *2014-2017*
- National Scholarship (Scale: 1%), China *2014-2015*

TALKS

- Predicting drug-disease associations based on machine learning methods, Online Bioinformatics Forum, 06/2018
- Predicting drug-disease associations based on machine learning methods, Wuhan University, 05/2018

TECHNICAL SKILLS

GitHub: <https://github.com/xiangyue9607>

Computer Languages	Python, MATLAB, JAVA, C/C++, HTML/CSS/JS
Library & Package	scikit-learn, numpy, pytorch, tensorflow
Databases	MySQL, MongoDB, SQLite
Tools	Git