JIAYUN ZHANG

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EDUCATION

University of California San Diego

Ph.D. Program in Computer Science and Engineering

Fudan University

B.S. in Computer Science (with honors)

La Jolla, CA, U.S.A Sep 2020 - Present Shanghai, China Sep 2015 - Jun 2020

PUBLICATIONS

- 1. Xiyuan Zhang, Ranak Roy Chowdhury, **Jiayun Zhang**, Dezhi Hong, Rajesh Gupta, Jingbo Shang Navigating Alignment for Non-identical Client Class Sets: A Label Name-Anchored Federated Learning Framework. To Appear: Proceedings of the 32nd ACM International Conference on Information and Knowledge Management (CIKM), 2023.
- Jiayun Zhang, Xiyuan Zhang, Xinyang Zhang, Dezhi Hong, Rajesh K. Gupta, Jingbo Shang. Navigating Alignment for Non-identical Client Class Sets: A Label Name-Anchored Federated Learning Framework. To Appear: Proceedings of the 29th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2023. [pdf]
- 3. **Jiayun Zhang**, Xinyang Zhang, Dezhi Hong, Rajesh K. Gupta, and Jingbo Shang. "Minimally Supervised Contextual Inference from Human Mobility: An Iterative Collaborative Distillation Framework." To appear: Proceedings of the 32nd International Joint Conferences on Artificial Intelligence (IJCAI), 2023.
- 4. **Jiayun Zhang**, Xinyang Zhang, Dezhi Hong, Rajesh K. Gupta, and Jingbo Shang. "DEMOMOTIF: Demographic Inference from Sparse Records of Shopping Transactions based on Motif Patterns." The 3rd International Workshop on Machine Learning on Graphs (MLoG) at the 16th ACM International Conference on Web Search and Data Mining (WSDM), Singapore, Mar. 3, 2023. [pdf]
- 5. Qingyuan Gong, Yushan Liu, **Jiayun Zhang**, Yang Chen, Qi Li, Yu Xiao, Xin Wang, Pan Hui. "Detecting Malicious Accounts in Online Developer Communities Using Deep Learning." *To appear: IEEE Transactions on Knowledge and Data Engineering (TKDE)*.
- 6. Huiying Li, Shawn Shan, Emily Wenger, **Jiayun Zhang**, Haitao Zheng, Ben Y. Zhao. "Blacklight: Defending Black-Box Adversarial Attacks on Deep Neural Networks." *Proceedings of 31st USENIX Security Symposium (USENIX Security)*, Boston, MA, Aug. 2022. [pdf]
- 7. Erzheng Fu, Yingqiu Zhuang, Jianxi Zhang, **Jiayun Zhang**, Yang Chen Understanding the User Interactions on GitHub: A Social Network Perspective. *Proceedings of the IEEE 24th International Conference on Computer Supported Cooperative Work in Design (CSCWD)*, Dalian, China, May 2021. [pdf]
- 8. Shawn Shan, Emily Wenger, **Jiayun Zhang**, Huiying Li, Haitao Zheng, Ben Y. Zhao. "Fawkes: Protecting Personal Privacy against Unauthorized Deep Learning Models." *Proceedings of the 29th USENIX Security Symposium (USENIX Security)*, Boston, MA, Aug. 2020. [pdf]
- 9. Yihan Ma, Hua Sun, Yang Chen, **Jiayun Zhang**, Yang Xu, Xin Wang, Pan Hui. DeepPredict: A Zone Preference Prediction System for Online Lodging Platforms. *Journal of Social Computing*, 2021, 2(1):52-70. [pdf]
- 10. **Jiayun Zhang**, Petr Byvshev, Yu Xiao. "Dataset: A video dataset of a wooden box assembly process." Proceedings of the 3rd Workshop on Data Acquisition to Analysis (DATA), co-located with the 18th ACM Conference on Embedded Networked Sensor Systems (SenSys), Virtual Event, Japan, Nov. 2020. [pdf]
- 11. **Jiayun Zhang**, Yang Chen, Qingyuan Gong, Aaron Yi Ding, Yu Xiao, Xin Wang, Pan Hui. "Understanding the Working Time of Developers in IT Companies in China and the United States." *IEEE Software*, 2021, 38(2):96-106. [pdf]
- 12. Qingyuan Gong, **Jiayun Zhang**, Yang Chen, Qi Li, Yu Xiao, Xin Wang, Pan Hui. "Detecting Malicious Accounts in Online Developer Communities Using Deep Learning." *Proceedings of the 28th ACM International Conference on Information and Knowledge Management (CIKM), Beijing, China, Nov. 2019.* [pdf]

- 13. Qingyuan Gong, **Jiayun Zhang**, Xin Wang, Yang Chen. "Identifying Structural Hole Spanners in Online Social Networks Using Machine Learning." *Proceedings of the ACM SIGCOMM 2019 Conference Posters and Demos, Beijing, China, Aug. 2019.* [pdf]
- 14. Yihan Ma, Hua Sun, Yang Chen, **Jiayun Zhang**, Yang Xu, Xin Wang, Pan Hui. "DeepLoc: A Location Preference Prediction System for Online Lodging Platforms." *Proceedings of the 14th CCF Chinese Conference on Computer Supported Cooperative Work (ChineseCSCW), Kunming, China, Aug. 2019.* [pdf]

INDUSTRIAL EXPERIENCE

VMware Information Technology (China) Co., Ltd.

MTS (Member of Technical Staff) Intern

Shanghai, China Apr 2018 – Oct 2018

- Developed a log analysis system for automatically detecting the causes of program failures. 67 types of error causes was detected with an accuracy of 0.936 on real-time data from an internal bug reporting platform.
- Developed web APIs for an internal cloud resource platform to support the use of virtual machine templates.
- Participated in the implementation of Template Validation Service, a system for security verification of virtual machine templates uploaded to database.

PROFESSIONAL SERVICES

- Reviewer, The 29th ACM SIGKDD Conference on Knowledge Discovery And Data Mining (KDD), 2023.
- Reviewer, ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp), 2023.
- Reviewer, The 37th AAAI Conference on Artificial Intelligence (AAAI), 2023.
- Reviewer, Computer Communications.

SELECTED AWARDS

2023 KDD Student Travel Award

2020 Outstanding Graduate of Fudan University

2020 Chun-Tsung Scholar (Research Program Funded by Nobel Laureate Dr. Tsung-Dao Lee)

2019 The First Prize of Shanghai Open Data Innovation Research Competition (Top 1 among 65 teams)

2019 Best Student Award, Mobile Systems and Networking Group at Fudan University (1 out of 32)

2018 Xiyuan Scholar (Undergraduate Research Program at Fudan University)

2016 & 2018 & 2019 Scholarship for Outstanding Students, Fudan University