Binchi Zhang

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Research Interests   Trustworthy Machine Learning, Graph Learning, Machine Unlearning, Federated Learning

Education

University of Virginia	Charlottesville, VA, USA
Ph.D. in Computer Engineering	09/2022 – Present
Advisor: Dr. Jundong Li	
Xi'an Jiaotong University	Xi'an, Shaanxi, China
B.E. in Electrical Engineering	09/2018 – 06/2022
GPA: 3.88/4.3.	

Publications   * indicates equal contribution

IDEA: A Flexible Framework of Certified Unlearning for Graph Neural Networks.
Yushun Dong, **Binchi Zhang**, Zhenyu Lei, Na Zou, Jundong Li.
ACM SIGKDD Conference on Knowledge Discovery & Data Mining (KDD), 2024.

Federated Graph Learning with Structure Proxy Alignment.
Xingbo Fu, Zihan Chen, **Binchi Zhang**, Chen Chen, Jundong Li.
ACM SIGKDD Conference on Knowledge Discovery & Data Mining (KDD), 2024.

Verification of Machine Unlearning is Fragile.
Binchi Zhang, Zihan Chen, Cong Shen, Jundong Li.
International Conference on Machine Learning (ICML), 2024.

Towards Certified Unlearning for Deep Neural Networks.
Binchi Zhang, Yushun Dong, Tianhao Wang, Jundong Li.
International Conference on Machine Learning (ICML), 2024.

Adversarial Attacks on Fairness of Graph Neural Networks.
Binchi Zhang, Yushun Dong, Chen Chen, Yada Zhu, Minnan Luo, Jundong Li.
International Conference on Learning Representations (ICLR), 2024.

AHEAD: A Triple Attention Based Heterogeneous Graph Anomaly Detection Approach.
Shujie Yang, **Binchi Zhang**, Shangbin Feng, Zhaoxuan Tan, Qinghua Zheng, Ziqi Liu, Minnan Luo.
Chinese Intelligent Automation Conference (CIAC), 2023 (Best Application Paper Finalist).

RELIANT: Fair Knowledge Distillation for Graph Neural Networks.
Yushun Dong, **Binchi Zhang**, Yiling Yuan, Na Zou, Qi Wang, Jundong Li.
SIAM International Conference on Data Mining (SDM), 2023.

TwiBot-22: Towards Graph-Based Twitter Bot Detection.
Shangbin Feng*, Zhaoxuan Tan*, Herun Wan*, Ningnan Wang*, Zilong Chen*, **Binchi Zhang***, Qinghua Zheng, Wenqian Zhang, Zhenyu Lei, Shujie Yang, Xinshun Feng, Qingyue Zhang, Hongrui Wang, Yuhan Liu, Yuyang Bai, Heng Wang, Zijian Cai, Yanbo Wang, Lijing Zheng, Zihan Ma, Jundong Li, Minnan Luo (* denotes equal contribution).
Advances in Neural Information Processing Systems (NeurIPS), Datasets and Benchmarks Track, 2022.

Federated Graph Machine Learning: A Survey of Concepts, Techniques, and Applications.
Xingbo Fu, **Binchi Zhang**, Yushun Dong, Chen Chen, Jundong Li.
SIGKDD Explorations Newsletter, 2022.
A short version appears at *FedGraph @ CIKM 2022.*

Safety in Graph Machine Learning: Threats and Safeguards.
Song Wang, Yushun Dong, **Binchi Zhang**, Zihan Chen, Xingbo Fu, Yinhan He, Cong Shen, Chuxu Zhang, Nitesh V. Chawla, Jundong Li.
arXiv preprint 2024.

ELEGANT: Certified Defense on the Fairness of Graph Neural Networks.
Yushun Dong, **Binchi Zhang**, Hanghang Tong, Jundong Li.
arXiv preprint 2023.

PPSGCN: A Privacy-Preserving Subgraph Sampling Based Distributed GCN Training Method.
Binchi Zhang, Minnan Luo, Shangbin Feng, Ziqi Liu, Jun Zhou, Qinghua Zheng.
arXiv preprint 2021.

	Honorable Mention, Mathematical Contest in Modeling	2022
	Meritorious Winner, Mathematical Contest in Modeling	2021
	Merit Student, Xi'an Jiaotong University	2020

Experience

Research Assistant, Department of ECE, UVA Advisor: Dr. Jundong Li	Jan 2024 - Present
Teaching Assistant, Department of ECE, UVA ECE 6501: Convex Optimization	Sep 2023 - Dec 2023
Data Justice Academy Peer Mentor, UVA Supervisor: Dr. Jundong Li	June 2023 - Aug 2023
Research Assistant, Department of ECE, UVA Advisor: Dr. Jundong Li	Sep 2022 - June 2023

Service

Reviewer for NeurIPS	2024, 2022
Reviewer for ICML	2024, 2022
Reviewer for AAAI	2024, 2023
Subreviewer for CIKM	2023
Subreviewer for WWW	2023
Reviewer for TNNLS	2023