

# Binchi Zhang

Updated May 5, 2025

Department of Electrical and Computer Engineering

University of Virginia

**Office:** C-308 Thornton Hall

**Phone:** (434) 257-8089

**Email:** epb6gw@virginia.edu

**Homepage:** <https://zhangbinchi.github.io/>

## Research Interests

Trustworthy AI, Machine Unlearning, and Graph Mining

## Education

**University of Virginia**

Charlottesville, VA, USA

Ph.D. in Computer Engineering

Sep 2022 – Present

Advisor: Dr. Jundong Li

**Xi'an Jiaotong University**

Xi'an, Shaanxi, China

B.E. in Electrical Engineering

Sep 2018 – Jun 2022

GPA: 3.88/4.3.

## Publications

(\* indicates equal contribution)

**Beyond the Permutation Symmetry of Transformers: The Role of Rotation for Model Fusion.**

**Binchi Zhang\***, Zaiyi Zheng\*, Zhengzhang Chen, Jundong Li.

*International Conference on Machine Learning (ICML), 2025 (Spotlight).*

**Virtual Nodes Can Help: Tackling Distribution Shifts in Federated Graph Learning.**

Xingbo Fu, Zihan Chen, Yinhan He, Song Wang, **Binchi Zhang**, Chen Chen, Jundong Li.

*AAAI Conference on Artificial Intelligence (AAAI), 2025.*

**Understanding and Modeling Job Marketplace with Pretrained Language Models.**

Yaochen Zhu, Liang Wu, **Binchi Zhang**, Song Wang, Qi Guo, Liangjie Hong, Luke Simon, Jundong Li.

*ACM International Conference on Information and Knowledge Management (CIKM), Applied Research Paper, 2024*

**Federated Graph Learning with Graphless Clients.**

Xingbo Fu, Song Wang, Yushun Dong, **Binchi Zhang**, Chen Chen, Jundong Li.

*Transactions on Machine Learning Research (TMLR), 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.*

**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.*

**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.*

**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.*

**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).*

**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 in *FedGraph @ CIKM 2022*.

**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.

*Advances in Neural Information Processing Systems (NeurIPS), Datasets and Benchmarks Track, 2022.*

### **Resolving Editing-Unlearning Conflicts: A Knowledge Codebook Framework for Large Language Model Updating.**

**Binchi Zhang**, Zhengzhang Chen, Zaiyi Zheng, Jundong Li, Haifeng Chen.  
*arXiv preprint 2025.*

### **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.*

### **Certified Defense on the Fairness of Graph Neural Networks.**

Yushun Dong, **Binchi Zhang**, Hanghang Tong, Jundong Li.  
*arXiv preprint 2023.*

### **Tackling the Local Bias in Federated Graph Learning.**

**Binchi Zhang**, Minnan Luo, Shangbin Feng, Ziqi Liu, Jun Zhou, Qinghua Zheng.  
*arXiv preprint 2021.*

## **Tutorials**

### **Federated Graph Learning: Recent Advances and Future Directions.**

Xingbo Fu, Zihan Chen, **Binchi Zhang**, Chen Chen, Jundong Li.  
*SIAM International Conference on Data Mining (SDM), 2025.*

## **Honors**

Wilson Bicentennial Grad Fellowship, Department of ECE, UVA	2024
NSF Graduate Student Travel Award, SDM	2025, 2023
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	Sep 2022 – Present
Research Intern, NEC Laboratories America, Inc. Mentor: Dr. Zhengzhang Chen	Oct 2024 – Mar 2025
Teaching Assistant, Department of ECE, UVA ECE 6501: Convex Optimization	Sep 2023 – Dec 2023

Data Justice Academy Peer Mentor, UVA

Jun 2023 – Aug 2023

### Service

Conference Reviewer: NeurIPS, ICLR, ICML, AAAI, AISTATS, WWW, CIKM.

Journal Reviewer: TPAMI, TIFS, TKDD, TNNLS.