# Zhe Xu

#### https://pricexu.github.io/ | zhexu3@illinois.edu

#### **EDUCATION**

University of Illinois Urbana-Champaign

Champaign, IL, USA

Ph.D. in Computer Science

Aug. 2021 - May. 2025 (expected)

University of Illinois Urbana-Champaign

Champaign, IL, USA

M.S. in Computer Science

Aug. 2019 – May. 2021

Fudan University

Shanghai, China

B.E. in Electronic Engineering

Sep. 2014 - Jun. 2018

#### Publication

#### **Preprint Papers**

- Zhe Xu, Yuzhong Chen, Qinghai Zhou, Yuhang Wu, Menghai Pan, Hao Yang, Hanghang Tong. Node Classification Beyond Homophily: A Structure Learning Approach. In submission.
- Beidi Zhao, Boxin Du, Zhe Xu, Liangyue Li, and Hanghang Tong. Learning Optimal Propagation for Graph Neural Networks. In submission.
- Qing Chen, Nan Chen, Guande Wu, Ziyan Liu, **Zhe Xu**, Hanghang Tong, and Nan Cao. AutoGraph: Automatic Discovery and Presentation of Graph Insights via Annotated Visualizations. In submission.

#### Accepted Papers

- Zhe Xu, Kaize Ding, Yu-Xiong Wang, Huan Liu, and Hanghang Tong. Generalized Few-Shot Node Classification on Graphs. ICDM 2022.
- Zhe Xu, Boxin Du, and Hanghang Tong. Graph Sanitation with Application to Node Classification. The Web Conf 2022.
- Zhe Xu, Si Zhang, Yinglong Xia, Liang Xiong, Jiejun Xu, and Hanghang Tong. DESTINE: Dense Subgraph Detection on Multi-Layered Networks. CIKM 2021.
- Zhe Xu, Si Zhang, Yinglong Xia, Liang Xiong, and Hanghang Tong. Ranking on Network of Heterogeneous Information Networks. IEEE BigData 2020.
- Dongqi Fu\*, Zhe Xu\*, Bo Li, Hanghang Tong, and Jingrui He. A View-Adversarial Framework for Multi-View Network Embedding. CIKM 2020. (\*equal contribution)
- Kaize Ding, **Zhe Xu**, Hanghang Tong, and Huan Liu. Data Augmentation for Deep Graph Learning: A Survey. SIGKDD explorations, 2022.
- Haiyun Jiang, Li Cui, **Zhe Xu**, Deqing Yang, et al. Relation Extraction Using Supervision from Topic Knowledge of Relation Labels. IJCAI 2019.

#### RESEARCH EXPERIENCE

#### Research Intern

New York City, NY, USA

 $Applied\ Machine\ Learning\ Team,\ Meta.\ Manager:\ Kelvin\ Niu.$ 

May. 2022 - Aug. 2022

• Constructed a large-scale representation learning system on user-video interaction data via graph neural networks.

#### Algorithm Engineer Intern

Hangzhou, Zhejiang, China

Search Department, Alibaba Group. Manager: Muhua Zhu.

Jun. 2018 - Aug. 2018

• Constructed E-commerce knowledge graphs on specific shopping topics.

#### Research Assistant

Champaign, IL, USA

University of Illinois at Urbana-Champaign. Advisor: Prof. Hanghang Tong.

Aug. 2019 - Present

• Conducted research on augmenting graph data

#### Research Assistant

Tempe, AZ, USA

Arizona State University. Advisor: Prof. Hanghang Tong.
• Conducted research on multi-layered networks.

Aug. 2018 - Aug. 2019

# Undergraduate Research Assistant

Shanghai, China

Fudan University. Advisor: Prof. Yanghua Xiao.

Sep. 2016 - Jun. 2018

• Constructed a financial product knowledge base and a financial product Q&A system (Chinese).

## GRANT EXPERIENCE

• Helped a successful NSF proposal on 'Collaborative Research: Towards a Theoretic Foundation for Optimal Deep Graph Learning'.

## TEACHING EXPERIENCE

Teaching Assistant

CS 512 Data Mining Principle

Teaching Assistant

CS 412 Introduction to Data Mining.

Champaign, IL, USA

Fall 2022, Spring 2021

 $Champaign,\,IL,\,USA$ 

Fall 2021