

EDUCATION

University of Illinois at Urbana-Champaign

Ph.D. student in Computer Science

University of Illinois at Urbana-Champaign

Master student in Computer Science

Fudan University

B.E. in Electronic Engineering

Champaign, IL, USA

Aug. 2021 – Present

Champaign, IL, USA

Aug. 2019 - May. 2021

Shanghai, China

Sep. 2014 - Jun. 2018

Publication

- Zhe Xu, Kaize Ding, Yu-Xiong Wang, Huan Liu, and Hanghang Tong. Generalized Few-Shot Node Classification on Graphs. In submission.
- Kaize Ding, **Zhe Xu**, Hanghang Tong, and Huan Liu. Data Augmentation for Deep Graph Learning: A Survey. 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.
- 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)
- 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 Assistant

Champaign, IL, USA

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

Aug. 2019 - Present

- Proposed an uncertainty-based shot-aware node classifier for the generalized few-shot node classification problem.
- Proposed a set of graph sanitization algorithms for boosting the performance of node classifiers.
- As a team member of the DARPA Modeling Adversarial Activities project, proposed and implemented solutions for the knowledge graph alignment part.
- Designed a graph fact extraction system as the backend of the graph storytelling project.
- Proposed an algorithm for detecting dense subgraphs on multi-layered networks.
- Proposed a view-adversarial multi-view network embedding framework.

Research Assistant

Tempe, AZ, USA

Arizona State University. Advisor: Prof. Hanghang Tong.

Aug. 2018 - Aug. 2019

• Proposed algorithms for mining side information in the interaction of domain heterogeneous information networks.

Algorithm Engineer Intern

Hangzhou, Zhejiang, China

Search Department, Alibaba Group

Jun. 2018 - Aug. 2018

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

Undergraduate Research Assistant

Shanghai, China

Shanghai Key Laboratory of Data Science, Fudan University. Advisor: Prof. Yanghua Xiao. Sep. 2016 – Jun. 2018

• Constructed a financial product knowledge base from online investment platforms and developed a financial product Q&A system (Chinese).

TEACHING EXPERIENCE

Teaching Assistant

CS 512 Data Mining Principle.

Teaching Assistant

CS 412 Introduction to Data Mining.

Champaign, IL, USA

 $Spring\ 2021$

Champaign, IL, USA

Fall 2021