Zhe Xu

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EDUCATION

University of Illinois at Urbana-Champaign Champaign, IL, USA
Ph.D. student in Computer Science *Aug. 2021 – Present*

University of Illinois at Urbana-Champaign Champaign, IL, USA
Master student in Computer Science *Aug. 2019 – May. 2021*

Fudan University Shanghai, China
B.E. in Electronic Engineering *Sep. 2014 – Jun. 2018*

PUBLICATION

- 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**, 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. TheWebConf 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   Champaign, IL, USA
CS 512 Data Mining Principle.   Spring 2021

Teaching Assistant   Champaign, IL, USA
CS 412 Introduction to Data Mining.   Fall 2021