Jian-an(Andy) Zhao

andy.zhaoja@gmail.com https://andy-border.github.io/ Google Scholar Page(46 citations)

Education

Beijing University of Posts and Telecommunications **Sep. 2017 – Jun. 2020**

Master of Science *BUPT School of Computer Science, BUPT GAMMA Lab*

- I achieved Master of Science majored in computer science in BUPT advised by Prof.Chuan Shi and Xiao Wang working on heterogeneous graph neural networks.

Beijing University of Posts and Telecommunications **Sep. 2013 – Jun. 2017**

Bachelor of Science (Engineering) *BUPT International School, Queen Mary Univ. of London*

- I achieved Bachelor of Science with Second-Class Honor at BUPT (joint program with Queen Mary University of London) majored in Telecommunications Engineering with Management.

Research Experience

Microsoft Research Asia **Jul. 2021 – Now**

Research Intern *Social Computing Group*

- My research focus on designing graph transformers advised by Chaozhuo Li and Xing Xie.
- I also work closely with my colleagues at Microsoft to design graph transformers for Bing Ads.

Case Western Reserve University **Aug. 2020 – May 2021**

Research Assistant *Yes-Lab*

- I focus on research related to self-supervised learning, graph neural networks, graph structure learning.
- I'm fortunate to be advised by Prof. Yanfang Ye and Prof. Chuxu Zhang.

Selected Publications / Manuscripts

Gophormer: Ego-Graph Transformer for Node Classification | PDF **Submitted to KDD22**

- Authors: Jianan Zhao, Chaozhuo Li, Qianlong Wen, Yiqi Wang, Yuming Liu, Hao Sun, Xing Xie, Yanfang Ye.
- Highlights: Gophormer is the SOTA graph transformer for node-level tasks, and is deployed in Microsoft BingAds.

Self-Supervised Graph Structure Refinement for Graph Neural Networks **Submitted to KDD22**

- Authors: Jianan Zhao, Qianlong Wen, Mingxuan Ju, Yanfang Ye, Chuxu Zhang.
- Highlights: The proposed graph structure learning framework GSR is effective (SOTA performance on six benchmark datasets), efficient, and scalable (13.8× faster using 32.8% GPU memory compared to the best GSL baseline on Cora).

HousE: Knowledge Graph Embedding with Householder Parameterization **Submitted to ICML22**

- Authors: Rui Li, Jianan Zhao, Chaozhuo Li, Di He, Xing Xie, et al.
- Highlights: We propose HousE, a generalization of existing rotation-based models while extending the rotations to high-dimensional spaces. HousE achieves new state-of-the-art performance on five benchmark datasets.

RxNet: Rx-refill Graph Neural Network for Overprescribing Detection | PDF **CIKM21**

- Authors: Jianfei Zhang, Ai-Te Kuo, Jianan Zhao, Qianlong Wen, Erin Winstanley, Chuxu Zhang, Yanfang Ye.
- Highlights: RxNet received the CIKM2021 Best Full Paper Award.

Multi-View Self-Supervised Heterogeneous Graph Embedding | PDF, Code **ECML/PKDD21**

- Authors: Jianan Zhao, Qianlong Wen, Shiyu Sun, Yanfang Ye, and Chuxu Zhang.
- Highlights: One of the earliest self-supervised heterogeneous graph embedding works.

Heterogeneous Graph Structure Learning for Graph Neural Networks | PDF, Code **AAAI21**

- Authors: Jianan Zhao, Xiao Wang, Chuan Shi, Binbin Hu, Guojie Song, and Yanfang Ye.
- Highlights: First heterogeneous graph structure learning framework, included in OpenHGNN.

Network Schema Preserving Heterogeneous Information Network Embedding | PDF, Code **IJCAI20**

- Authors: Jianan Zhao, Xiao Wang, Chuan Shi, Zekuan Liu, and Yanfang Ye.
- Highlights: NSHE proposes to capture the network schema proximity and is included in both DGL and OpenHGNN.

Services

- Community Service: Founding committee member of the MLNLP community (over 50k subscribers).
- Peer Review: Reviewer for ICML2022, KDD2022, TNNLS-2021, TKDE-2021.
- Open Source Projects: NSHE in DGL and OpenHGNN, HGSL in OpenHGNN.
- Invited Talks: Hete. graph structure learning AI-Drive Webinair; graph transformers at BUPT GAMMA Lab.
- Conference Volunteer: Leading volunteer (in charge of registration center) of CIKM 2019.
- Teaching Assitant: Computer Fundamentals and C Programming (2017-2018 semester).

Reference Contacts

- Xing Xie, IEEE Fellow, Senior Principal Research Manager at Microsoft Research Asia (xingx@microsoft.com).
- Chuan Shi, Professor at Beijing University of Posts and Telecommunications (shichuan@bupt.edu.cn).