Xuan Yang

+86 18868104192 | xuany@zju.edu.cn
Hangzhou, Zhejiang, China
Website: xuanyang19.github.io

EDUCATION

Zhejiang University Sep 2020 - Mar 2023

College of Computer Science and Technology Master student, Computer Science Hangzhou, China

GPA: 3.98/4.00

Zhejiang University Sep 2016 - Jun 2020

College of Computer Science and Technology Bachelor of Engineering, Digital Media Technology Hangzhou, China

GPA: 3.85/4.00 The last two years GPA: 3.98/4.00

PUBLICATIONS

- **Xuan Yang**, Yang Yang, Jintao Su, Yifei Sun, Shen Fan, Zhongyao Wang, Jun Zhan, and Jingmin Chen. Who's Next: Rising Star Prediction via Diffusion of User Interest in Social Networks. In IEEE Transaction on Knowledge and Data Engineering, doi: 10.1109/TKDE.2022.3151835, 2022
- Jintao Su, Yang Yang, **Xuan Yang**, Yuxiao Dong and Chilie Tan. DeepGraphlet:Estimating Local Graphlet Frequencies with Graph Neural Networks. Under review.
- **Xuan Yang**, Yang Yang, Chenhao Tan, Yinghe Lin, Zhengzhe Fu, Fei Wu, Yueting Zhuang. Unfolding and Modeling the Recovery Process after COVID Lockdowns. Under review.
- **Xuan Yang**, Quanjin Tao, Xiao Feng, Donghong Cai, Xiang Ren, and Yang Yang. Multimodal Learning with Graph Alignment on Social Media. Preprint.
- Taoran Fang, Zhiqing Xiao, Chunping Wang, Jiarong Xu, **Xuan Yang**, Yang Yang. DropMessage: Unifying Random Dropping for Graph Neural Networks. AAAI 2023 Accepted.
- Teng Ke, Yang Yang, Shiliang Pu, **Xuan Yang**, Quanjin Tao, Yifei Sun, Weihao Jiang, Hui Wang and Yingye Yu. Detecting Telecommunication Frauds by Human-in-the-Loop Graph Neural Networks. Under review.

RESEARCH EXPERIENCE

Multimodal Learning with Graph Alignment on Social Media Jun 2022 - Present

Digital Media Computing & Design Lab, Zhejiang University Hangzhou, China

- Incorporate social network with text and image data for user representation learning and create the first large-scale multimodal social media dataset with graph information.
- Propose a multi-step graph alignment pretraining task for mutual information maximization and develop an efficient graph multimodal pretraining framework to fuse multiple modalities.

Unfolding and Modeling the Economic Recovery after COVID Lockdowns Jun 2021 - Feb 2022

Digital media Computing & Design Lab, Zhejiang University Hangzhou, China

- Proposed novel computational methods based on electricity data to study the recovery process: a recovery index for sector(economic) recovery evaluation; a change-point algorithm for non-subjective policy assessment; a graph-learning based recovery prediction model and counterfactual experiments for policy-making support.
- Conducted a case study on Hangzhou, China that discovered diverse recovery patterns and various policy effects.

Estimating Graphlet Counts on Billion-scale Graphs May 2021 - Dec 2021

Digital Media Computing & Design Lab, Zhejiang University Hangzhou, China

- Designed DeepGraphlet with k-tuple features and multi-task to estimate the graphlet counting.
- Achieved 60%+ improvement on the estimation accuracy on real graphs; 20x speedup on billion-scale graphs.

Alleviate Recommendation System Disequilibrium Jan 2021 - May 2021

Data and Technology Department, Alibaba Hangzhou, China

- Proposed the rising star problem in online maketing.
- Designed RiseNet: a GNN-based framework with self-supervised multi-task learning strategy for dynamic graph learning; a coupled mechanism to solve multi-modal time series data fusion problem.
- Achieved 30%+ improvement in F1 score on the real-world Taocode.

INTERNSHIP EXPERIENCE

Data and Technology Department, Alibaba Group Oct 2020 - Dec 2021

Machine Learning Intern, Data Assets and Algorithm team Hangzhou, China

- Analyzed the family recommendation on Taobao (the largest e-commerce platform in China) and designed a family marketing model for enhancing family goods recommendation.
- Built the billion-scale Taocode recommendation datasets and developed an algorithm to recommend items for "Xiaoheihe" and "Taojianghu" functions on Taobao APP, boosting CTR by 2.3% compared with the baseline production strategy.

Center for Magnetic Nanotechnology, Stanford University Jan 2019 - Mar 2019

Research Intern, Probing Protein-Protein Interactions with High-Throughput GMR Protein Arrays Stanford, CA

- Helped collect the amount of seven viruses in serum of 300 patients through GMR biosensors.
- Used machine learning models to explore the relationship between the viruses and the liver cancer and discovered weak correlation between the viruses and the liver cancer.

Biomedical Institute for Global Health Research and Technology at NUS Jul 2018 - Aug 2018

Research Intern , the Taste Healthy project, Big Brain Singapore

- Helped develop a mobile app for the Taste Healthy project.
- Developed a crawler to collect food pictures from the web and trained ResNet on the collected data for food identification.

PROJECT EXPERIENCE

"Mg" Chemistry Lab (Virtual Reality Program) Jun 2019 - Sep 2019

- Designed and coded a VR-based program: primary school students can conduct simple chemical experiments in the virtual chemical lab under the guidance of cartoon characters, helping them learn chemical knowledge safely.

"Battle of the oasis" (Online 3D PC Game) Mar 2019 - Jul 2019

- Participated in developing an online 3D PC shooting game, responsible for state machine, 2D animation, blueprint and 3D modeling

LEADERSHIP EXPERIENCE

Internet Association of Zhejiang University Oct 2020 - Present

- Mentored six undergraduate students that interested in machine learning to conduct related projects and study research topics

Zhejiang University Creative Media Student Association, President Sep 2017 - Jun 2018

- Organized multimedia-related activities on campus (e.g., "Hugging Me" that helped eliminate prejudice among people).

SELECTED HONORS

Tencent Technology Excellence Scholarship October 2022

Outstanding Student Award, Zhejiang University October 2022

First-class Academic Prize, Zhejiang University November 2022

Zhejiang University Student Academic Scholarship, Zhejiang University October 2021

MISCELLANEOUS

- **Skills:** Python; Pytorch; C++; 3D Modeling (Zbrush, Maya); Game/VR building (Unity; Unreal Engine)
- **Languages:** TOFEL 107
- **Hobbies:** Photography (PS/ PR); Piano; Painting; Basketball