

Yuanchen Bei

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EDUCATION

Zhejiang University, Hangzhou, P.R. China

- M.S. in Computer Technology Sep 2022 – Mar 2025
 - Now a second-year master's student in the College of Computer Science and Technology.
 - Cumulative GPA: 3.74 / 5.00

Jinan University, Guangzhou, P.R. China

- B.S. in Computer Science and Technology Sep 2018 – Jun 2022
 - Graduated with Outstanding Honors.
 - Cumulative GPA: 4.25 / 5.00 (ranking 1 / 84)

RESEARCH INTERESTS

- My research interests are graph learning and information retrieval, with current particular emphasis on ***graph anomaly detection, recommender systems, and multi-modal relation modeling with graphs.***
- I have published multiple papers on top-tier data mining conferences, such as WWW, ICDE, and ICDM.

EXPERIENCE

Eagle Lab@Zhejiang University, Hangzhou, P.R. China

- Research Assistant Sep 2022 – Mar 2025
 - Supervisors: Prof. Sheng Zhou and Prof. Jiajun Bu
 - Focus: large-scale graph learning & application, multi-modal relation learning

CRO Security Technology Team@Alibaba Group, Hangzhou, P.R. China

- Research Intern, Graph Risk Control Group Jun 2023 – Nov 2023
 - Supervisors: Mr. Ao Li
 - Focus: graph anomaly detection and multi-label node classification.

NLP Center@Meituan, Beijing, P.R. China

- Research Intern, Graph Learning Group Feb 2022 – Aug 2022
 - Supervisors: MS. Hao Xu and MS. Mengdi Zhang
 - Focus: dynamic graph learning and graph pre-training.

RecSys Group@Jinan University, Guangzhou, P.R. China

- Research Assistant Oct 2019 – Jan 2022
 - Supervisors: Dr. Hao Chen and Prof. Feiran Huang
 - Focus: graph learning and recommender systems.

PUBLICATIONS

CONFERENCE PAPERS (* EQUAL CONTRIBUTIONS)

- [7] Hao Chen*, Yuanchen Bei*, Qijie Shen, Yue Xu, et.al, “Macro Graph Neural Networks for Online Billion-Scale Recommender Systems”, in *WWW*, 2024. [**Applied in Alibaba Taobao homepage**]
- [6] Yuanchen Bei, Hao Xu, Sheng Zhou, Huixuan Chi, et.al, “CPDG: A Contrastive Pre-Training Method for Dynamic Graph Neural Networks”, in *ICDE*, 2024.
- [5] Yuanchen Bei, Sheng Zhou, Qiaoyu Tan, Hao Xu, et.al, “Reinforcement Neighborhood Selection for Unsupervised Graph Anomaly Detection”, in *ICDM*, 2023.
- [4] Yijie Zhang, Yuanchen Bei, Shiqi Yang, Hao Chen, et.al, “Alleviating Behavior Data Imbalance for Multi-Behavior Graph Collaborative Filtering”, in *IWLKG@ICDM*, 2023.
- [3] Yuanchen Bei, Hao Chen, Shengyuan Chen, Xiao Huang, et.al, “Non-Recursive Cluster-Scale Graph Interacted Model for Click-Through Rate Prediction”, in *CIKM*, 2023.
- [2] Huixuan Chi, Hao Xu, Mengya Liu, Yuanchen Bei, et.al, “Modeling Spatiotemporal Periodicity and Collaborative Signal for Local-Life Service Recommendation”, in *KDAH@CIKM*, 2023.
- [1] Yue Xu, Hao Chen, Zengde Deng, Yuanchen Bei, and Feiran Huang, “Flattened Graph Convolutional Networks For Recommendation”, in *DLP@KDD*, 2022.

PREPRINT PAPERS

- [3] Yuanchen Bei, Sheng Zhou, Jinke Shi, Yao Ma, et.al, “Guarding Graph Neural Networks for Unsupervised Graph Anomaly Detection”, under *TNNLS* review, 2024.

- [2] Yijie Zhang, Yuanchen Bei, Hao Chen, Qijie Shen, et.al, “Multi-Behavior Collaborative Filtering with Partial Order Graph Convolutional Networks”, under *KDD* review, 2024. **[Applied in Alibaba Taobao recommendations]**
- [1] Feiran Huang, Zhenghang Yang*, Junyi Jiang*, Yuanchen Bei*, et.al, “Large Language Model Interaction Simulator for Cold-Start Item Recommendation”, in *Arxiv*, 2024.

PATENTS

- [2] Feiran Huang, Zhiquan Liu, and Yuanchen Bei, “Text Sentiment Analysis Method Based on Multi-Level Graph Pooling”, in *US Patent*, No. 11,687,728, 2023.
- [1] Feiran Huang, Guan Liu, and Yuanchen Bei, “Social Recommendation Method Based on Multi-Feature Heterogeneous Graph Neural Networks”, in *US Patent*, No. 11,631,147, 2023.

OPEN-SOURCE PROJECTS

- Graph Pre-Training Library (A Comprehensive Library of Graph Pre-Training Literature)
- DreamerGPT: Chinese Instruction-tuning for Large Language Model (Instruction Tuning for Open-Source LLMs with Chinese Corpus)
- Cold-Start Recommendation Library (A Comprehensive Library of Cold-Start Recommendation Literature)
- DGraph-Fin Leaderboard Top-2 Solution (A Large-Scale Dynamic Graph Anomaly Detection Leaderboard)

HONORS & AWARDS

- Outstanding Undergraduate Student & Thesis Jun 2022
- National Scholarship Dec 2021
- First Class Scholarship, Jinan University May 2020

ACADEMIC SERVICES

- Conference Reviewer: KDD 2024.
- Invited Journal Reviewer: ACM TKDD, IEEE TII.

[CV compiled on 2024-05-09]