# Yuanchen Bei

Zhejiang University, 38 Zheda Road, Hangzhou, P.R. China yuanchenbei@zju.edu.cn • +(86) 135-3532-6165 • https://yuanchenbei.github.io

#### **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

• Cumulative GPA: 4.25 / 5.00 (ranking 1 / 84)

Graduated with Outstanding Honors.

Sep 2018 – Jun 2022

#### RESEARCH INTERESTS

- My research interests mainly include graph learning and data mining, with current particular emphasis on graph anomaly detection, recommender systems, and multi-modal relation modeling with graphs.
- I have published multiple papers on representative data mining conferences, such as WWW, ICDE, ICDM, and CIKM.

### **EXPERIENCE**

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

Research Assistant

Sep 2022 - Mar 2025

- Supervisors: Prof. Sheng Zhou and Prof. Jiajun Bu
- Focus: graph learning, graph anomaly detection, and 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)**

- [4] Hao Chen\*, <u>Yuanchen Bei</u>\*, Qijie Shen, Yue Xu, et.al, "Macro Graph Neural Networks for Online Billion-Scale Recommender Systems", in *WWW*, 2024. **[Applied in Alibaba Taobao Homepage]**
- [3] <u>Yuanchen Bei</u>, Hao Xu, Sheng Zhou, Huixuan Chi, et.al, "CPDG: A Contrastive Pre-Training Method for Dynamic Graph Neural Networks", in *ICDE*, 2024.
- [2] <u>Yuanchen Bei</u>, Sheng Zhou, Qiaoyu Tan, Hao Xu, et.al, "Reinforcement Neighborhood Selection for Unsupervised Graph Anomaly Detection", in *ICDM*, 2023.
- [1] <u>Yuanchen Bei</u>, Hao Chen, Shengyuan Chen, Xiao Huang, et.al, "Non-Recursive Cluster-Scale Graph Interacted Model for Click-Through Rate Prediction", in *CIKM*, 2023.

#### PRE-PRINT PAPERS (\* EQUAL CONTRIBUTIONS)

- [3] <u>Yuanchen Bei</u>, Sheng Zhou, Jinke Shi, Yao Ma, et.al, "Guarding Graph Neural Networks for Unsupervised Graph Anomaly Detection", under *TNNLS* review, 2024.
- [2] Yijie Zhang, <u>Yuanchen Bei</u>, Hao Chen, Qijie Shen, et.al, "Multi-Behavior Collaborative Filtering with Partial Order Graph Convolutional Networks", under *KDD ADS-Track* review, 2024. **[Applied in Alibaba Taobao Homepage]**
- [1] Feiran Huang, Zhenghang Yang\*, Junyi Jiang\*, <u>Yuanchen Bei</u>\*, et.al, "Large Language Model Interaction Simulator for Cold-Start Item Recommendation", in *Arxiv*, 2024.

#### WORKSHOP PAPERS

- [3] Yijie Zhang, <u>Yuanchen Bei</u>, Shiqi Yang, Hao Chen, et.al, "Alleviating Behavior Data Imbalance for Multi-Behavior Graph Collaborative Filtering", in *IWLKG@ICDM*, 2023.
- [2] Huixuan Chi, Hao Xu, Mengya Liu, <u>Yuanchen Bei</u>, et.al, "Modeling Spatiotemporal Periodicity and Collaborative Signal for Local-Life Service Recommendation", in *KDAH@CIKM*, 2023.
- [1] Yue Xu, Hao Chen, Zengde Deng, <u>Yuanchen Bei</u>, and Feiran Huang, "Flattened Graph Convolutional Networks For Recommendation", in *DLP@KDD*, 2022.

#### **PATENTS**

- [2] Feiran Huang, Zhiquan Liu, and <u>Yuanchen Bei</u>, "Text Sentiment Analysis Method Based on Multi-Level Graph Pooling", in *US Patent*, No. 11,687,728, 2023.
- [1] Feiran Huang, Guan Liu, and <u>Yuanchen Bei</u>, "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

- First Class Scholarship, Zhejiang University
- 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 (Since 2023), IEEE TII (Since 2024), IEEE TKDE (Since 2024).

[CV compiled on 2024-05-11]

Nov 2023