

Zhuoning Guo 郭茁宁

Ph.D. Student | The Hong Kong University of Science and Technology (Guangzhou) | 2022-2026 (Expected)

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Date of Birth: April 17th, 2000 | Links: [Personal Homepage](#); [GitHub](#); [Google Scholar](#)

Research Interest: Information Retrieval, Multimodal Large Language Model, Graph Learning

EDUCATION

- **The Hong Kong University of Science and Technology (Guangzhou)**, China (*Ph.D.*) 2022.09-Now
 - Artificial Intelligence Thrust, Information Hub (*Supervisors: Prof. Hao Liu & Prof. Qiang Yang*)
- **Harbin Institute of Technology**, Harbin, Heilongjiang, China (*B.E.*) 2018.08-2022.06
 - Software Engineering, Faculty of Computing GPA: 3.6/4.0, rank 7% (overall)

INTERNSHIP

- **Alibaba Tongyi Lab (Research Intern)** 2025.03-Now
 - **Topics:** Post-training Qwen embedding for multimodal retrieval
- **Baidu Recommendation Architecture Department (Remote Research Intern)** 2024.05-2024.02
 - **Topics:** Information retrieval for industrial recommender system
- **Baidu Research & Talent Intelligence Center (Research Intern)** 2021.10-2022.08
 - **Topics:** Spatial-temporal modeling for business intelligence
- **Tencent AI Lab & HKUST (Remote Research Intern)** 2021.05-2021.10
 - **Topics:** Graph learning for social science
- **Microsoft Research Asia (MSRA), DKI Group (Research Intern)** 2020.11-2021.04
 - **Topics:** Computer vision and graphics for design intelligence

VISIT

- **The Hong Kong University of Science and Technology**, Hong Kong, China 2024.01-2024.08
 - Visiting Ph.D. student of Department of Computer Science and Engineering
- **University of Cambridge**, England 2020.01-2020.02
 - Visiting undergraduate of Fitz William College (*With scholarships from HIT*)

PUBLICATION

- [SIGKDD 2025 (Under Review)] Zhuoning Guo, et al. "GPU-accelerated Multi-relational Parallel Graph Retrieval for Web-scale Recommendations."
- [SIGKDD 2025 (Under Review)] Zhuoning Guo, et al. "Against Multifaceted Graph Heterogeneity via Asymmetric Federated Prompt Learning."
- [SIGKDD 2024 (Oral)] Zhuoning Guo, et al. "HiFGL: A Hierarchical Framework for Cross-silo Cross-device Federated Graph Learning."
- [SIGKDD 2022 (Oral)] Zhuoning Guo, et al. "Talent Demand-Supply Joint Prediction with Dynamic Heterogeneous Graph Enhanced Meta-Learning."
- [PAKDD 2025 (Oral)] Zhuoning Guo, et al. "Labor Migration Modeling through Large-scale Job Query Data."
- [SIGKDD 2024 (Workshop)] Zhuoning Guo, et al. "Discrepant Homophily co-preserved Graph Convolutional Network for Labor Migration Forecasting."
- [Arxiv] Zhuoning Guo, et al. "Convergence-aware Clustered Federated Graph Learning Framework for Collaborative Inter-company Labor Market Forecasting."

- [AAAI 2024 (Oral)] Wen Shuo Chao, Zhaopeng Qiu, Likang Wu, **Zhuoning Guo**, et al. “A Cross-View Hierarchical Graph Learning Hypernetwork for Skill Demand-Supply Joint Prediction.”
- [AAAI 2023] Yang Liu, Yu Rong, **Zhuoning Guo**, et al. “Human Mobility Modeling During the COVID-19 Pandemic via Deep Graph Diffusion Infomax.”
- [TVCG] Wen Yuan Kong, Zhaoyun Jiang, Shizhao Sun, **Zhuoning Guo**, et al. “Aesthetics++: Refining Graphic Designs by Exploring Design Principles and Human Preference.”

AWARD

- **NOIP First Award (Twice, Top 20)** (2018 HIT Independent Recruitment Admission) 2013.11 & 2016.11
- Mathematical Contest in Modeling (MCM) Finalist Top 1% (International, Leader) 2020.03
- National IoT Competition Northeast Region Special Award Top 4 (Leader) 2020.08
- Kaggle Competition: Machine Learning from Disaster 6% 2019.12-2020.01
- Contemporary Undergraduate Mathematical Contest in Modeling First Award 2019.10

HONOR

- President of HIT Chess Club 2019-2022
- University Outstanding CLP Member 2019
- University Outstanding Student Cadre 2020
- Chairman of Massive Data Club 2020-2022
- Captain of the Football Team of the Faculty of Computing 2020-2022

VOLUNTEER

- **Volunteer of The Innovation & Entrepreneurship Education Alliance of China** 2019.10
 - **Introduction:** Volunteer at the annual meeting of The Innovation and Entrepreneurship Education Alliance of China, undertaken by Harbin Institute of Technology.
- **Teaching volunteer, Shangri-La, Yunnan, China** 2019.01-2019.02
 - **Introduction:** Teaching students several subjects at a local suburban primary school.

SKILL

- English: IELTS 6.5(5.5) (2021.08)
- Programming Language: Python (Recently), C/C++, Java, C#
- Frameworks: PyTorch(-Lightning), Transformers, Deepspeed, Pandas, DGL, PyG, NetworkX, ...