

Peiyan, Zhang

CONTACT INFORMATION	Hong Kong University of Science and Technology, Clear Water Bay, Kowloon, Hong Kong Tel: 852-52602547 E-mail: pzhangao@connect.ust.hk	Personal Web LinkedIn Google Scholar
RESEARCH INTERESTS	<ul style="list-style-type: none">• Deep Learning on Graphs• Data-Centric AI, Data-Efficient Learning• Trustworthy AI: Robustness, Interpretability, Privacy, and Fairness• AI for Science, Healthcare, and Epidemiology	
EDUCATION	The Hong Kong University of Science and Technology, Hong Kong <ul style="list-style-type: none">• Ph.D., Computer Science and Engineering• Supervisor: Prof. Yangqiu Song Beijing Institute of Technology, China <ul style="list-style-type: none">• Bachelor of Science, Computer Science, GPA: 3.94/4.0, Ranking: 1/193	08/2020 – 07/2025 09/2016 – 07/2020
INTERSHIP EXPERIENCE	University of Illinois Urbana-Champaign, USA Research Collaboration with Prof. Haohan Wang Microsoft Software Technology Center Asia, Beijing Research Intern Beijing Academy of Artificial Intelligence, Beijing Research Intern Microsoft Research Asia, Beijing Research Intern	08/2022 – Present 05/2024 – 05/2025 06/2023 – 12/2023 03/2022 – 04/2023
HONORS AND AWARDS	<ul style="list-style-type: none">• Excellence in Review Award by Future Generation Computer Systems (FGCS) 2025• ACM SIGIR Student Travel Grant for SIGIR 2024 2024• Winners of Amazon KDD Cup 2023 Challenge (3rd Place in the World) 2023• Award of Excellence of Stars of Tomorrow Internship Program in Microsoft Research Asia (Top 10%) 2023• Best Paper Award - Honorable Mention in WSDM 2023 2023• HKUST RedBird PhD Scholarship 2020• Graduate Excellence Award of Beijing (top 1%) 2020• National Scholarship for 2018-2019 Academic Year (top 0.2%) 2019• National Scholarship for 2017-2018 Academic Year (top 0.2%) 2018• National Scholarship for 2016-2017 Academic Year (top 0.2%) 2017• Honorable Mention in Mathematical Contest in Modeling/Interdisciplinary Contest in Modeling 2019• First-class Scholarship (for six semesters) 2019• First Prize of Dots and Boxes Project in the 13th China Computer Game Championship 2019• Third Place in the Simulation Game of the Medium Size Group in 2018 China Robot Competition 2018	

PUBLICATION

GoogleScholar:

https://scholar.google.com/citations?hl=en&user=A1_FpIcAAAAJ&view_op=list_works

- Impact: 500+citations, h-index: 12

Journal Papers

* indicates equal contribution

- “Advancing Session-Based Recommendations with Atten-Mixer+: Dynamic and Adaptive Multi-Level Intent Mining”
Juyong Jiang*, **Peiyan Zhang***, Yingtao Luo, Chaozhao Li, Jae Boum Kim, Kai Zhang, Senzhang Wang, Sunghun Kim, Philip S. Yu.
IEEE Transactions on Knowledge and Data Engineering (TKDE), 2025.
- “Improving Sequential Recommendations via Bidirectional Temporal Data Augmentation With Pre-Training”
Peiyan Zhang, Jiayan Guo, Chaozhao Li, Liying Kang, Jaeboum Kim, Jie Xu, Xi Zhang, Yan Zhang, Haohan Wang, Sunghun Kim.
ACM Transactions on Intelligent Systems and Technology (TIST), 2024.

Conference Papers

* indicates equal contribution

- “Revolve: Optimizing AI Systems by Tracking Response Evolution in Textual Optimization”
Peiyan Zhang, Haibo Jin, Leyang Hu, Xinnuo Li, Liying Kang, Man Luo, Yangqiu Song, Haohan Wang.
International Conference on Machine Learning (ICML), 2025.
- “Foundation Model-oriented Robustness: Robust Image Model Evaluation with Pretrained Models”
Peiyan Zhang, Haoyang Liu, Chaozhao Li, Xing Xie, Sunghun Kim, Haohan Wang.
International Conference on Learning Representations (ICLR), 2024.
- “GPT4Rec: Graph Prompt Tuning for Streaming Recommendation”
Peiyan Zhang, Yuchen Yan, Chaozhao Li, Liying Kang, Xi Zhang, Feiran Huang, Senzhang Wang, Sunghun Kim.
International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2024. [Oral]
- “TransGNN: Harnessing the Collaborative Power of Transformer and Graph Neural Network for Recommender Systems”
Peiyan Zhang, Yuchen Yan, Chaozhao Li, Xi Zhang, Senzhang Wang, Feiran Huang, Xing Xie, Sunghun Kim.
International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2024. [Oral]
- “High-Frequency-aware Hierarchical Contrastive Selective Coding for Representation Learning on Text Attributed Graphs”
Peiyan Zhang, Chaozhao Li, Liying Kang, Feiran Huang, Senzhang Wang, Xing Xie, Sunghun Kim.
International World Wide Web Conference (WWW), 2024. [Oral]
- “Inductive Graph Alignment Prompt: Bridging the Gap between Graph Pre-training and Inductive Fine-tuning From Spectral Perspective”
Yuchen Yan*, **Peiyan Zhang***, Zheng Fang, QingQing Long.
International World Wide Web Conference (WWW), 2024. [Oral]
- “A Comprehensive Study on Text-attributed Graphs: Benchmarking and Rethinking”
J Hao Yan, Chaozhao Li, Ruosong Long, Chao Yan, Jianan Zhao, Wenwen Zhuang, Jun Yin, **Peiyan Zhang**, Weihao Han, Hao Sun, Weiwei Deng, Qi Zhang, Lichao Sun, Xing Xie, Senzhang Wang.
Advance in Neural Information Processing Systems (NeurIPS), 2023.
- “AdaMCT: Adaptive Mixture of CNN-Transformer for Sequential Recommendation”
Juyong Jiang*, **Peiyan Zhang***, Yingtao Luo, Chaozhao Li, Jaeboum Kim, Kai Zhang, Senzhang Wang, Xing Xie and Sunghun Kim.

International Conference on Information and Knowledge Management (CIKM), 2023. **[Oral]**

- “Continual Learning on Dynamic Graphs via Parameter Isolation”
Peiyan Zhang*, Yuchen Yan*, Chaozhuo Li, Senzhang Wang, Xing Xie, Guojie Song, Sunghun Kim.
International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR), 2023. **[Oral]**

- “Efficiently Leveraging Multi-level User Intent for Session-based Recommendation via Atten-Mixer Network”
Peiyan Zhang*, Jiayan Guo*, Chaozhuo Li, Yueqi Xie, Jaeboum Kim, Yan Zhang, Xing Xie, Haohan Wang, Sunghun Kim.
International Conference on Web Search and Data Mining (WSDM), 2023.

[Best Paper Honorable Mention (Top 2%) & Oral]

- “Evolutionary Preference Learning via Graph Nested GRU ODE for Session-based Recommendation ”
Jiayan Guo*, **Peiyan Zhang***, Chaozhuo Li, Xing Xie, Yan Zhang, Sunghun Kim.
International Conference on Information and Knowledge Management (CIKM), 2022. **[Oral]**

TEACHING EXPERIENCE

- Teaching Assistant
 - COMP3111 Software Engineering at HKUST Fall 2022
 - COMP4901U Computer Language Processing at HKUST Fall 2021
 - COMP1021 Introduction to Computer Science at HKUST Spring 2021

SERVICES

Program Committee Member

- SIGIR-AP 2025
- SIGIR 2025
- AAAI 2025
- WWW 2024 Data-centric Artificial Intelligence Workshop
- KDD 2024 Ethical Artificial Intelligence Workshop

Reviewer

- Conference: NeurIPS, ICLR, ICML, KDD, WWW, SIGIR, CVPR, ACL, EMNLP, AAAI, IJCAI, PAKDD, AISTAT
- Journal: IEEE Transactions on Neural Networks and Learning Systems, Neurocomputing, Neural Networks, Information Fusion, Neural Computing & Applications, Future Generation Computer Systems, Computers in Biology and Medicine