

# Xiangyu Zhao

CONTACT INFORMATION	Lau Ming Wai Academic Building City University of Hong Kong 83 Tat Chee Avenue Kowloon Tong, Hong Kong DBLP: <a href="https://dblp.org/pid/08/890-1.html">https://dblp.org/pid/08/890-1.html</a> GoogleScholar: <a href="https://scholar.google.com/citations?user=Nkm9r2IAAAAJ">https://scholar.google.com/citations?user=Nkm9r2IAAAAJ</a>	Homepage: <a href="https://zhaoxyai.github.io/">https://zhaoxyai.github.io/</a> LinkedIn: <a href="https://linkedin.com/in/zhaoxiangyu/">https://linkedin.com/in/zhaoxiangyu/</a> E-mail: <a href="mailto:xianzhao@cityu.edu.hk">xianzhao@cityu.edu.hk</a> Phone: +852 3442 5242 (HK) Fax: +852 3442 0515 (HK)
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	POSITIONS	<b>Associate Professor (tenured)</b> , City University of Hong Kong Department of Data Science, College of Computing Jul 2025 - Present
		<b>Assistant Professor (tenure-track)</b> , City University of Hong Kong Department of Data Science, College of Computing Sep 2021 - Jun 2025
		<b>Adjunct Associate Professor</b> , City University of Hong Kong Shenzhen Research Institute & Dongguan Campus Sep 2021 - Present
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EDUCATION		<b>Director</b> , City University of Hong Kong Applied Machine Learning (AML) Lab, 39 PhD students Sep 2021 - Present
		<b>Cluster Co-PC</b> , City University of Hong Kong Cluster of Health Data and Models, Institute of Digital Medicine (IDM) Sep 2024 - Present
		<b>Consultant Expert on Recommender Systems</b> , Kuaishou.com A leading short video planform in China with 700 million active users Dec 2023 - Present
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		<b>Michigan State University</b> <b>Doctor of Philosophy (Ph.D.)</b> in Computer Science and Engineering Jan 2017 - May 2021 <ul style="list-style-type: none"><li>• Advisor: Prof. Jiliang Tang</li><li>• Thesis: Adaptive and Automated Deep Recommender System</li><li>• Global Chinese AI Rising Stars (Top 25 in Data Mining), Joint AAAI/ACM SIGAI Doctoral Dissertation Award Nomination (one per institution), Criteo Research Faculty Award, Bytedance Research Collaboration Award, MSU Dissertation Completion Fellowship</li></ul>
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		<b>University of Science and Technology of China</b> <b>Master of Science (M.S.)</b> in Computer Science and Technology Sep 2014 - Jun 2017 <ul style="list-style-type: none"><li>• Advisor: Prof. Enhong Chen</li><li>• Thesis: Exploring the Choice under Conflict for Social Event Participation</li><li>• Outstanding Master's Thesis Award (Top 15 in Anhui Province, China), Outstanding Graduate Award of USTC, National Scholarship for Graduate Students of China (Highest National Scholarship)</li></ul>
		<b>University of Electronic Science and Technology of China</b> <b>Bachelor of Engineering (B.Eng.)</b> in Software Engineering Sep 2010 - Jun 2014 <ul style="list-style-type: none"><li>• Advisor: Prof. Tao Zhou and Prof. Ming Tang</li><li>• Thesis: Identifying Effective Multiple Spreaders by Coloring Complex Networks</li><li>• Outstanding Graduation Thesis Award (1% in university, 1/205 in department), Outstanding Graduate Award of UESTC</li></ul>
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<b>RESEARCH EXPERIENCE</b>	<b>Kuaishou.com</b> (A leading short video platform in China with 700 million active users)	
	<b>Consultant Expert</b>	Dec 2023 - Present
	<ul style="list-style-type: none"> <li>• Major collaborator: Dr. Peng Jiang, VP of Technology</li> <li>• Collaboration Topic: Consultancy Service for Retention Optimization for Short Video Recommendation Based on Reinforcement Learning and AutoMIL</li> <li>• 6 papers in top conferences (e.g., KDD, NeurIPS, WWW, SIGIR), 1 online deployed platform</li> </ul>	
	<b>Data Science and Engineering Lab</b> , Michigan State University	
	<b>Ph.D. Research Assistant</b>	Jan 2017 - May 2021
	<ul style="list-style-type: none"> <li>• Advisor: Prof. Jiliang Tang</li> <li>• Research Interests: Machine Learning, Information Retrieval, Urban Computing</li> <li>• 20+ papers in top conferences (e.g., KDD, WWW, SIGIR, AAAI, ICDE, ICDM, CIKM, WSDM, RecSys) and journals (e.g., SIGKDD, SIGWeb)</li> </ul>	
	<b>Applied Machine Learning Research</b> , Bytedance (US)	
	<b>Research Intern</b>	Jan 2021 - Apr 2021
	<ul style="list-style-type: none"> <li>• Mentor: Dr. Chong Wang</li> <li>• Worked on AutoML for Recommendation/Advertising</li> <li>• The outcomes were published in KDD'21, ICDM'21 (Best-ranked Papers)</li> </ul>	
	<b>Artificial Intelligence Foundation</b> , LinkedIn	
	<b>Research Engineering Intern</b>	May 2020 - Aug 2020
	<ul style="list-style-type: none"> <li>• Mentors: Dr. Huiji Gao and Dr. Bo Long</li> <li>• Worked on AutoML for Search/Recommendation/Advertising</li> <li>• The outcomes were published in WWW'21</li> </ul>	
	<b>Applied Machine Learning</b> , Bytedance	
	<b>Research Intern</b>	Jun 2019 - Dec 2019
	<ul style="list-style-type: none"> <li>• Mentors: Dr. Chong Wang and Xiaobing Liu</li> <li>• Worked on Reinforcement Learning and AutoML for Advertising/Recommendation</li> <li>• The outcomes were published in KDD'20, SIGIR'20, AAAI'21</li> </ul>	
	<b>Advertising Department</b> , Bytedance	
	<b>Invited Visiting Scholar</b>	Sep 2018
	<ul style="list-style-type: none"> <li>• Mentor: Dr. Xiwang Yang</li> <li>• Investigated Reinforcement Learning Based Computational Advertising</li> </ul>	
	<b>Data Science Lab</b> , JD.com	
	<b>Research Intern</b>	May 2018 - Aug 2018
	<ul style="list-style-type: none"> <li>• Mentor: Dr. Dawei Yin</li> <li>• Worked on Reinforcement Learning Based Recommender System</li> <li>• The outcomes were published in CIKM'20, SIGIR'20, WWW'21</li> </ul>	
	<b>Data Science Lab</b> , JD.com	
	<b>Research Intern</b>	Jun 2017 - Aug 2017
	<ul style="list-style-type: none"> <li>• Mentor: Dr. Dawei Yin</li> <li>• Worked on Deep Learning Based Recommender System</li> <li>• The outcomes were published in KDD'18, RecSys'18, ACM SIGWEB'19</li> </ul>	

**Laboratory of Big Data Analysis and Application**, University of Science and Technology of China

**M.S. Research Assistant**

Sep 2014 - Dec 2016

- Advisor: Prof. Enhong Chen
- Research Interests: Data Mining, Urban Computing
- The outcomes were published in KDD'16, ICDM'17, DASFAA'17, KSEM'17

**Big Data Research Center**, University of Electronic Science and Technology of China

**Undergraduate Research Assistant**

Sep 2011 - Jun 2014

- Advisors: Prof. Tao Zhou and Prof. Ming Tang
- Research Interests: Social Network and Complex Network Analysis, Complex System
- The outcomes were published in Europhysics Letters, Acta Physica Sinica

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**ACADEMIC  
HONORS  
& AWARDS**

- (International) **KDD'25 Best Paper Award Runner Up (ADS Track)** 2025
- (National/Regional) Outstanding Project of the CCF Industry-Academia Cooperation Fund (CCF-Tencent Open Fund 2023 - Medical LLMs), Top 10 in China 2025
- (University) CityU Outstanding Teaching Performance Award in Semester B, 2024/25 2025
- (National/Regional) Hong Kong RGC Collaborative Research Fund (CRF), Key Project of Hong Kong RGC, HKD7,670,000, the ONLY assistant professor in Engineering 2025
- (International) Top 2% Scientists Worldwide 2024 by Stanford University 2024
- (University) **CityU Outstanding Research Award, designated as CityU Thetos Young Scholar (two awardees per year)** 2024
- (International) **Silver medal (2/508 overall) in Amazon KDD CUP 2024**, supervisor 2024
- (International) **Champion (1/1500+ overall) in NeurIPS Competition 2024**, supervisor 2024
- (National/Regional) Hong Kong RGC Research Impact Fund (RIF), Key Project of Hong Kong RGC, HKD7,000,000, the ONLY assistant professor since 2020 2024
- (International) Bronze Award in the 4th Asia Exhibition of Innovations and Inventions (AEII) hfill 2024
- (International) Outstanding Project in CCF-Tencent Open Fund 2023 (6/26) 2024
- (International) The Silver Medal in the International Exhibition of Inventions Geneva 2023
- (National/Regional) The championship (Postgraduate Session) in the IET Young Professionals Exhibition & Competition (YPEC 2023), supervisor 2023
- (International) CCF-Alimama Research Fund (PI) 2024
- (International) CCF-BaiChuan-Ebtech Foundation Model Fund (PI) 2023
- (International) CCF-Tencent Open Fund (PI) 2023
- (International) Tencent Focused Research Fund (PI) 2023
- (International) Ant Group Research Fund (PI) 2023

- (National/Regional) Environment and Conservation Fund (ECF, as Co-PI) 2023
- (National/Regional) Midstream Research Programme for Universities (MRP, as Co-I) 2023
- (International) Huawei Innovation Research Program (PI) 2023
- (International) **ICDM 2022 Best-ranked Papers Award** 2022
- (International) Outstanding Project in CCF-Tencent Open Fund 2021 (8/34) 2022
- (International) The Gold Medal and Top 10 best innovation award, the 7th International Invention Innovation Competition in Canada (iCAN 2022), supervisor 2022
- (International) The Gold Award with Grand Prize (US\$13,000) and **Microsoft Outstanding AI Influencer Award**, the Global AI Challenge for Building E&M Facilities, supervisor 2022
- (National/Regional) The 3rd place in Carbon Neutral Competition track, the 3rd Shandong Province Data Application Innovation and Entrepreneurship Competition, supervisor 2022
- (International) CCF-Ant Research Fund (PI) 2022
- (International) CCF-Tencent Open Fund (PI) 2021
- (International) ICDM 2021 Best-ranked Papers Award 2021
- (International) Nomination for Joint AAAI/ACM SIGAI Doctoral Dissertation Award 2021
- (International) Global Chinese AI Rising Stars (Top 25 in Data Mining) 2021

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## SERVICES

### Journal Editor

- Neural Networks, Action Editor 2025-
- Nature npj Artificial Intelligence, Editorial Board 2025-
- ACM Transactions on the Web, Distinguished Review Board 2022-Present
- Frontiers in Big Data, Topic Editor 2022-2024

### Conference Chair and Organizer

- Tutorial Co-Chair @ WWW'25 May 2025
- Registration Co-Chair @ ISNN'25 Apr 2025
- Registration Co-Chair @ IEEE ICICIP'25 Feb 2025
- Award and Grant Co-Chair @ ADC'24 Dec 2024
- Publicity Co-Chair @ NLPCC'24 Nov 2024
- Tutorial Co-Chair @ APWeb-WAIM'24 Aug 2024

### Conference Senior Area Chair

- International Conference on Machine Learning (ICML) 2025

### Conference Area Chair

- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2025-2026

- Conference on Neural Information Processing Systems (NeurIPS) 2025
- International Conference on Learning Representations (ICLR) 2025-2026
- International Conference on Artificial Intelligence and Statistics (AISTATS) 2025-2026
- International Joint Conferences on Artificial Intelligence (IJCAI) 2025

#### **Conference Session Chair**

- Conference on Neural Information Processing (ICONIP'20) Nov 2020  
Session: Natural Language Processing

#### **Workshop Chair and Organizer**

- TrustKDD: Workshop on Trustworthy Knowledge Discovery and Data Mining @ CIKM'25  
Nov 2025
- AgentIR: 2nd Workshop on Agent-based Information Retrieval Introduction @ SIGIR'25  
Jul 2025
- AgentIR: 1st Workshop on Agent-based Information Retrieval Introduction @ SIGIR'24  
Jul 2024
- 2nd Workshop on Recommendation With Generative Models @ WWW'24 May 2024
- 4th Workshop on Reinforcement Learning for Information Retrieval @ CIKM'23 Oct 2023
- 5th Workshop on Deep Learning Practice and Theory for High-Dimensional Sparse and Imbalanced Data @ RecSys'23 Sep 2023
- HK Forum on DSAI 2023 Jul 2023
- 3rd Workshop on Reinforcement Learning for Information Retrieval @ SIGIR'22 Jul 2022  
One of the most popular workshops at SIGIR'22 with more than 300 attendees
- HK Forum on DSAI 2022 Jun 2022
- 2nd Workshop on Reinforcement Learning for Information Retrieval @ SIGIR'21 Jul 2021  
One of the most popular workshops at SIGIR'21 with more than 200 attendees
- 2nd Workshop on Deep Reinforcement Learning for Knowledge Discovery @ WWW'21  
Apr 2021  
One of the most popular workshops at WWW'21 with more than 200 attendees
- 27th International Conference on Neural Information Processing (ICONIP'20) Nov 2020  
Session Chair of Natural Language Processing Session
- Workshop on Reinforcement Learning for Information Retrieval @ SIGIR'20 Jul 2020  
One of the most popular workshops at SIGIR'20 with more than 200 attendees
- Workshop on Deep Reinforcement Learning for Knowledge Discovery @ KDD'19  
Aug 2019  
One of the most popular workshops at KDD'19 with more than 500 attendees

#### **Conference Senior Program Committee Member**

- The Web Conference (WWW) 2023-2026

- ACM International Conference on Web Search and Data Mining (WSDM) 2022-2026
- ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR) 2023-2025
- Conference on Information and Knowledge Management (CIKM) 2023-2025
- Pacific-Asia Conference on Knowledge Discovery and Data Mining (PAKDD) 2024-2026
- International Joint Conferences on Artificial Intelligence (IJCAI) 2021-2024
- AAAI Conference on Artificial Intelligence (AAAI) 2023-2024
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2022

#### **Conference Program Committee Member**

- The Web Conference (WWW) 2025
- IEEE International Conference on Data Mining (ICDM) 2022-2025
- ACM Conference on Recommender Systems (RecSys) 2019-2025
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2021-2024
- International Conference on Learning Representations (ICLR) 2020-2024
- Conference on Neural Information Processing Systems (NeurIPS) 2021-2024
- SIAM International Conference on Data Mining (SDM) 2022-2024
- IEEE International Conference on Big Data (BigData) 2018-2024
- International Conference on Machine Learning (ICML) 2021-2024
- ACM International Conference on Multimedia (ACM MM) 2023-2024
- The Web Conference (WWW) 2024
- AAAI Conference on Artificial Intelligence (AAAI) 2020-2022
- International Joint Conferences on Artificial Intelligence (IJCAI) 2020-2022
- ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR) 2022
- Conference on Information and Knowledge Management (CIKM) 2020-2022
- European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD) 2022
- European Conference on Information Retrieval (ECIR) 2021
- Conference on Neural Information Processing (ICONIP) 2020
- Reinforcement Learning for Real Life@ICML'19 2019-2021
- Workshop on Artificial Intelligence for Education@AAAI'20 2020
- Workshop on Industrial Recommendation Systems@KDD'20 2020

- Conference on Natural Language Processing and Chinese Computing (NLPCC) 2019

#### **Grant Reviewer**

- Czech Science Foundation 2024-Present
- Chile National Research and Development Agency of the Ministry of Science 2024-Present

#### **Journal Reviewer**

- IEEE Transactions on Knowledge and Data Engineering (IEEE TKDE) 2019 – Present
- ACM Transactions on Knowledge Discovery from Data (ACM TKDD) 2018 – Present
- ACM Transactions on Information Systems (ACM TOIS) 2020 – Present
- ACM Computing Surveys (ACM CSUR) 2021 – Present
- Machine Learning 2020 – Present
- Journal of Computer Science and Technology (JCST) 2020 – Present
- ISPRS International Journal of Geo-Information (IJGI) 2020 – Present
- Information Sciences (INS) 2024 – Present
- IEEE Transactions on Intelligent Transportation Systems (IEEE TITS) 2022 – Present
- ACM Transactions on Intelligent Systems and Technology (CCM TIST) 2022 – Present
- IEEE Transactions on Neural Networks and Learning Systems (IEEE TNNLS) 2023 – Present
- IEEE Transactions on Mobile Computing (IEEE TMC) 2023 – Present
- ACM Transactions on Recommender Systems (ACM TORS) 2023 – Present
- IEEE Internet of Things Journal (IEEE IoT) 2023 – Present

#### **Community Organizer**

- MLNLP: Founding academic committee members 2021-2024  
The largest AI community in China with millions of subscribers

#### **Internal Service**

- RAE Coordinator, Department of Data Science, CityU 2025-Present
- GE1601 Coordinator, Department of Data Science, CityU 2025-Present
- Internship Coordinator, Department of Data Science, CityU 2023-Present
- Co-PC of the Health Data and Models Cluster, Institute of Digital Medicine (IDM), CityU 2024-Present

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#### **PROJECTS**

##### **Ongoing Projects:**

- 1) Trustworthy Large Language Models: A Multifaceted Strategy for Truthfulness, Fairness, and Privacy Preservation
  - **PC:** External, Hong Kong RGC Collaborative Research Fund (CRF), 30/06/2025-30/06/2028, HKD8,270,285. **The Key Project of Hong Kong RGC, the only assistant professor in Engineering**
- 2) Integrating ChatGPT with Search Engine, Recommender System and Online Advertising to Enhance User Experience on Online Service Platforms
  - **PC:** External, Hong Kong RGC Research Impact Fund (RIF), 01/06/2024-30/11/2027, HKD7,000,000. **The Key Project of Hong Kong RGC, the only assistant professor to lead an RIF project since 2020**
- 3) Research and Application of Personalized RAG for Large Language Models
  - **PI:** External, Huawei Innovation Research Program (9231621), 01/04/2025-31/12/2028, HKD3,020,000.
- 4) Joint Modeling of Search and Recommendation based on Large Language Models
  - **PI:** External, Huawei Young Scholar Funding Scheme (9220144), 01/04/2025-31/12/2028, HKD330,000.
- 5) Research on Large Model Recall Based on User's Deep Interests
  - **PI:** External, CCF-Alimama Research Fund, 01/12/2024-01/12/2025, RMB300,000.
- 6) Sequential Recommendation Model Based on Heterogeneous User Behavior
  - **PI:** External, Tencent Rhino-Bird Focused Research Fund, 18/01/2024-31/12/2028, HKD400,000.
- 7) Cooperation on Adaptive Joint Modeling Technology for Multi-scenario Recommender Systems
  - **PI:** External, Huawei Innovation Research Program (9239109), 15/03/2023-31/12/2028, HKD1,841,500. **Outstanding Project Award of Huawei, 2 online launched systems, ICDM'21 and ICDM'22 Best Ranked Papers Award**
- 8) Research of Multi-task Parameter Efficient Fine-tuning based and Knowledge Graph Enhanced Medical Large Language Model
  - **PI:** External, CCF-Tencent Open Fund, 01/12/2023-31/12/2026, HKD250,284.39. **Outstanding Project in CCF-Tencent Open Fund (6/26)**
- 10) Development of An AI-Powered Software System for Forecasting the Full Sequence of Day-ahead Wind Power
  - **Co-I (25%):** External, ITF Midstream Research Programme for Universities (MRP), 01/07/2023-31/08/2025, HKD3,130,000.
- 11) Wise-waste System Integration Development and Policies Applications in Hong Kong
  - **Co-PI (50%):** Internal, SIRG-CityU Strategic Interdisciplinary Research Grant, 01/05/2022-31/10/2025, HKD300,000.
- 12) Research and Development of Federated Learning Technology with Research Knowledge Graphs and Large Language Models for Digital Transformation of Science, Technology and Innovation Services
  - **Co-I:** External, ITF Research, Academic and Industry Sectors One-plus Scheme (ITF RAISE+), HKD43,200,000.



### Approved Projects (notified of being funded, contract signing process):

- 1) Research on Personalized Bidding and Advertising Placement Based on Reinforcement Learning
  - **PI:** External, Tencent Rhino-Bird Focused Research Fund, HKD400,000
- 2) Research on Multi-modal and Multi-language Medical Large Models Based on Dynamic Knowledge
  - **PI:** External, Tencent Rhino-Bird Research Fund, RMB250,000

### Completed Projects:

- 1) Personalized Medical Content Recommendation System based on Multimodal and AutoML
  - **PI:** External, CCF-Tencent Open Fund, 01/12/2021-31/12/2023, HKD261,725. **Outstanding Project in CCF-Tencent Open Fund (8/34)**
- 2) Short Video Recommendation Retention Optimization Based on Reinforcement Learning and AutoML
  - **PI:** External, Kuaishou Consultation Service, 13/12/2023-13/12/2024, RMB500,000. **1 online launched system**
- 3) Unified Multi-modal Multi-task Learning Paradigm for Smart Cities
  - **PI:** Internal, HKIDS Early Career Research Grant, 01/11/2022-31/10/2024, HKD500,000.
- 4) Developing Largescale Streaming Recommender System via Deep Reinforcement Learning Techniques
  - **PI:** Internal, APRC - CityU New Research Initiatives (CityU Start-up Fund), 01/03/2022-31/12/2024, HKD1,113,600.
- 5) A Social Media Powered Preseason Production Planning System for Fast-fashion New Releases
  - **Co-PI:** Internal, SIRG-CityU Strategic Interdisciplinary Research Grant, 05/22-10/24, HKD200,000.
- 6) Developing a Low-carbon Smart-waste System for Carbon MRV (Monitoring, Reporting and Verification): Community Demonstration and Strengthen the Public Participation
  - **Co-I (35%):** External, Environment and Conservation Fund (ECF), 01/11/23-31/10/24, HKD731,200.
- 7 ) Adaptive and Automated Deep Recommender Systems
  - **PI:** Internal, MSU Dissertation Completion Fellowship, 2020.
- 8) Deep Reinforcement Learning for Computational Advertising
  - **Co-I:** External, Bytedance Research Collaboration Award, 2018.
- 9) Deep Reinforcement Learning for Capturing Real-Time Feedback
  - **Co-I:** External, Criteo Faculty Research Award, 2018.
- 10) Identifying Effective Multiple Spreaders by Coloring Complex Networks
  - **PI:** Internal, Ginkgo Innovation and Entrepreneurship Fund, 2013, outstanding completed project.

11) Epidemic spreading on multi-relational networks

- **Co-I:** Internal, Ginkgo Innovation and Entrepreneurship Fund, 2012, outstanding completed project.

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**PUBLICATIONS   Google Scholar**

- Citation Count: 8500+
- H-index: 49

**Tutorials (10)**

- Qidong Liu, **Xiangyu Zhao**, Yuhao Wang, Yejing Wang, Zijian Zhang, Yuqi Sun, Xiang Li, Maolin Wang, Pengyue Jia, Chong Chen, Wei Huang, Feng Tian, “*Large Language Model Enhanced Recommender Systems: Methods, Applications and Trends*”, 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD’2025**).
- Zijian Zhang, Xiao Han, **Xiangyu Zhao**, Chenjuan Guo, Bin Yang, “*Learning from Spatio-Temporal Data in the LLM Era: Foundations, Models, and Emerging Trends*”, 19th International Symposium on Spatial and Temporal Data (**SSTD’2025**).
- **Xiangyu Zhao**, Xiangyu Zhao, Yichao Wang, Bo Chen, Pengyue Jia, Yuhao Wang, Jingtong Gao, Huifeng Guo, Ruiming Tang, “*Joint Modeling in Recommendations: Foundations and Frontiers*”, 30th International Joint Conference on Artificial Intelligence (**IJCAI’2023**).
- Wenqi Fan, **Xiangyu Zhao**, Xiao Chen, Jingran Su, Jingtong Gao, Lin Wang, Qidong Liu, Yiqi Wang, Han Xu, Lei Chen, Qing Li, “*Trustworthy Recommender Systems*”, 30th International Joint Conference on Artificial Intelligence (**IJCAI’2023**).
- Wenqi Fan, **Xiangyu Zhao**, Xiao Chen, Jingran Su, Jingtong Gao, Lin Wang, Qidong Liu, Yiqi Wang, Han Xu, Lei Chen, Qing Li, “*Trustworthy Recommender Systems*”, 29th ACM SIGKDD Conference on Knowledge Discovery and Data (**KDD’2023**).
- Wenqi Fan, **Xiangyu Zhao**, Xiao Chen, Jingran Su, Jingtong Gao, Lin Wang, Qidong Liu, Yiqi Wang, Han Xu, Lei Chen, Qing Li, “*Trustworthy Recommender Systems*”, The Web Conference 2023 (**WWW’2023**).
- Ruiming Tang, Bo Chen, Yejing Wang, Huifeng Guo, Yong Liu, Wenqi Fan, **Xiangyu Zhao**, “*AutoML for Deep Recommender Systems: Fundamentals and Advances*”, 16th ACM International Conference on Web Search and Data Mining (**WSDM’2023**).
- **Xiangyu Zhao**, Wenqi Fan, Bo Chen, Ruiming Tang, “*Automated Machine Learning for Recommendations: Fundamentals and Advances*”, The Web Conference 2022 (**WWW’2022**).
- **Xiangyu Zhao**, Wenqi Fan, Dawei Yin, Jiliang Tang, “*Deep Recommender System: Fundamentals and Advances*”, The Web Conference 2021 (**WWW’2021**).
- Wenqi Fan, **Xiangyu Zhao**, Dawei Yin, Jiliang Tang, “*Deep Learning for Recommendations: Fundamentals and Advances*”, 30th International Joint Conference on Artificial Intelligence (**IJCAI’2021**).

**Journal Papers (33)**

- Yantong Du, Rui Chen, Qiaoyu Tan, Qilong Han, Shenjie Wang, **Xiangyu Zhao**, “Cross-Task Collaborative Meta-Learning for Cold-Start Recommendations”, Transactions on Knowledge and Data Engineering (**TKDE**), 2025, accepted. (IF: 8.9)
- Qihong Pan, Hong Zheng, Zhenzhen Zhao, Guojiang Shen, **Xiangyu Zhao**, Xiangjie Kong, “CTKGRec: A Context-Aware Temporal Knowledge Graph Reasoning Model for Next POI Recommendation”, Expert Systems With Applications (**ESWA**), 2025, accepted. (IF: 7.5)
- Wei Yuan, Guanhua Ye, Xiangyu Zhao, Quoc Viet Hung Nguyen, Yang Cao, **Hongzhi Yin**, “Tackling Data Heterogeneity in Federated Time Series Forecasting”, SCIENCE CHINA Information Sciences (**SCIS**), 2025, accepted. (IF: )
- Kai Li, Yupeng Deng, Jingbo Chen, Yu Meng, Zhihao Xi, Junxian Ma, Chenhao Wang, Maolin Wang, **Xiangyu Zhao**, “PolyFootNet: Extracting Polygonal Building Footprints in Off-Nadir Remote Sensing Images”, IEEE Transactions on Geoscience and Remote Sensing (**TGRS**), 2025, accepted. (IF: 8.6)
- Xiaopeng Li, Lixin Su, Pengyue Jia, **Xiangyu Zhao\***, Suqi Cheng, Junfeng Wang, Dawei Yin, Qi Xuan, Xiaoni Yang, “Agent4Ranking: Semantic Robust Ranking via Personalized Query Rewriting Using Multi-agent LLM”, ACM Transactions on Information Systems (**TOIS**), 2025, accepted. (IF: 5.4)
- Jiajun Zhou, Chenxuan Xie, Shengbo Gong, Zhenyu Wen, **Xiangyu Zhao**, Qi Xuan, Xiaoni Yang, “Data Augmentation on Graphs: A Technical Survey”, ACM Computing Surveys (**CSUR**), 2025, accepted. (IF: 23.8)
- Teng Guo, Bojun Zhan, Shuyan Huang, Jiahao Chen, **Xiangyu Zhao**, Mingliang Hou, Zitao Liu, “Improving Knowledge Tracing through Multi-Source Scaling with Decoder-Only Transformers”, ACM Transactions on Intelligent Systems and Technology (**TIST**), 2025, accepted. (IF: 6.6)
- Qing Yu, Lixin Zou, Xiangyang Luo, **Xiangyu Zhao**, Chenliang Li, “Uniform Graph Pre-training and Prompting for Transferable Recommendation”, ACM Transactions on Information Systems (**TOIS**), 2025, accepted. (IF: 5.4)
- Xihong Yang, Yiqi Wang, Jin Chen, Wenqi Fan, **Xiangyu Zhao**, En Zhu, Xinwang Liu, Defu Lian, “Dual Test-time Training for Out-of-distribution Recommender System”, IEEE Transactions on Knowledge and Data Engineering (**TKDE**), 2025, accepted. (IF: 8.9)
- Qingqing Yi, Jingjing Tang, **Xiangyu Zhao**, Yujian Zeng, Zengchun Song, “An Adaptive Entire-space Multi-scenario Multi-task Transfer Learning Model for Recommendation”, IEEE Transactions on Knowledge and Data Engineering (**TKDE**), 2025, accepted. (IF: 8.9)
- Wei Jiang, Yanhui Hu, **Xiangyu Zhao\***, “The Impact of Artificial Intelligence on Carbon Market in China: Evidence from Quantile-on-quantile Regression Approach”, Technological Forecasting and Social Change (**Techfore**), 2025, accepted. (IF: XXX)
- Qidong Liu, Zhaopeng Qiu, **Xiangyu Zhao\***, Xian Wu, Zijian Zhang, Tong Xu, Feng Tian, “A Contrastive Pretrain Model with Prompt Tuning for Multi-center Medication Recommendation”, ACM Transactions on Information Systems (**TOIS**), 2025, accepted. (IF: 5.4)

- Qidong Liu, Jiayi Hu, Yutian Xiao, **Xiangyu Zhao\***, Jingtong Gao, Wangyu Wang, Qing Li, Jiliang Tang, “*Multimodal Recommender Systems: A Survey*”, ACM Computing Surveys (**CSUR**), 2024, accepted. (IF: 23.8)
- Haoran Yang, Yuhao Wang, **Xiangyu Zhao\***, Hongxu Chen, Hongzhi Yin, Qing Li, Guandong Xu, “*Multi-level Graph Knowledge Contrastive Learning*”, IEEE Transactions on Knowledge and Data Engineering (**TKDE**), 2024, accepted. (IF: 8.9)
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- **Xiangyu Zhao**, Long Xia, Jiliang Tang, Dawei Yin, “*Deep Reinforcement Learning for Search, Recommendation, and Online Advertising: A Survey*”, ACM SIGWEB Newsletter (SIGWEB), 2019, Issue Spring: Article No.4. (IF: 0.6) **Top-2 Most Cited Paper 2 / 556 in Journal History**
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- Xiao Han, Zimo Zhao, Wanyu Wang, Maolin Wang, Zitao Liu, Yi Chang, **Xiangyu Zhao\***, “*Data Efficient Adaptation in Large Language Models via Continuous Low-Rank Fine-Tuning*”, 39th Conference on Neural Information Processing Systems (NeurIPS’2025), accepted, CCF A.

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- Zhenyu Deng, Ying Liu, Ming Tang, **Xiangyu Zhao\***, “Twice the Gradient, Twice the Privacy Risk in Federated Learning? A Case Study of Federated Recommendation Systems”, 25th IEEE International Conference on Data Mining (**ICDM’2025**), accepted, CCF B.
- Wei Jiang, Tong Chen, Wei Yuan, **Xiangyu Zhao**, Quoc Viet Hung Nguyen, Hongzhi Yin,, “Towards Propagation-aware Representation Learning for Supervised Social Media Graph Analytics”, 25th IEEE International Conference on Data Mining (**ICDM’2025**), accepted, CCF B.
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- Xiaopeng Li, Jingtong Gao, Pengyue Jia, **Xiangyu Zhao\***, Yichao Wang, Wanyu Wang, Yejing Wang, Yuhao Wang, Huifeng Guo, Ruiming Tang, “Scenario-Wise Rec: A Multi-Scenario Recommendation Benchmark”, 34th ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.
- Binhao Wang, Yutian Xiao, Maolin Wang, Zhiqi Li, Tianshuo Wei, Ruocheng Guo, **Xiangyu Zhao\***, “SPARK: Adaptive Low-Rank Knowledge Graph Modeling in Hybrid Geometric Spaces for Recommendation”, 34th ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.
- Yuhao Wang, Junwei Pan, Xinhang Li, Maolin Wang, Yuan Wang, Yue Liu, Dapeng Liu, Jie Jiang, **Xiangyu Zhao\***, “Empowering Large Language Model for Sequential Recommendation via Multimodal Embeddings and Semantic IDs”, 34th ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.
- Tongzhou Wu, Yuhao Wang, Maolin Wang, Chi Zhang, **Xiangyu Zhao\***, “Empowering Denoising Sequential Recommendation with Large Language Model Embeddings”, 34th ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.
- Dayan Pan, Zhaoyang Fu, Jingyuan Wang, Xiao Han, Yue Zhu, **Xiangyu Zhao\***, “Contextual Attention Modulation: Towards Efficient Multi-Task Adaptation in Large Language Models”, 34th ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.
- Yue Que, Yingyi Zhang, **Xiangyu Zhao\***, Chen Ma, “Causality-aware Graph Aggregation Weight Estimator for Popularity Debiasing in Top-K Recommendation”, 34th ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.

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- Langming Liu, Haibin Chen, Yuhao Wang, Yujin Yuan, Shilei Liu, Wenbo Su, **Xiangyu Zhao**, “*ECKGBench: Benchmarking Large Language Models in E-commerce Leveraging Knowledge Graph*”, 34th ACM International Conference on Information and Knowledge Management (**CIKM’2024**), Resource Paper Track, accepted, CCF B.
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- Langming Liu, Wanyu Wang, Chi Zhang, Bo Li, Hongzhi Yin, Xuetao Wei, Wenbo Su, Bo Zheng, **Xiangyu Zhao\***, “*Multi-task offline Reinforcement Learning for Online Advertising in Recommender Systems*”, 31st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD’2025**), CCF A.
- Chao Zhang, Haoxin Zhang, Shiwei Wu, Di Wu, Tong Xu, **Xiangyu Zhao\***, Yan Gao, Yao Hu, Enhong Chen, “*NoteLLM-2: Multimodal Large Representation Models for Recommendation*”, 31st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD’2025**), CCF A. **1 online launched system at Xiaohongshu**
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- Qidong Liu, **Xiangyu Zhao\***, Yuhao Wang, Yejing Wang, Zijian Zhang, Yuqi Sun, Xiang Li, Maolin Wang, Pengyue Jia, Chong Chen, Wei Huang, Feng Tian, “*Large Language Model Enhanced Recommender Systems: A Survey*”, 31st ACM SIGKDD Conference on Knowledge Discovery and Data Mining (**KDD’2025**), CCF A.
- Maolin Wang, Tianshuo Wei, Sheng Zhang, Ruocheng Guo, Wangyu Wang, Shanshan Ye, Lixin Zou, Xuetao Wei, **Xiangyu Zhao**, “*DANCE: Resource-Efficient Neural Architecture Search with Data-Aware and Continuous Adaptation*”, 34th International Joint Conference on Artificial Intelligence (**IJCAI’2025**), CCF A.
- Feng Liu, Lixin Zou, **Xiangyu Zhao**, Min Tang, Liming Dong, Dan Luo, Xiangyang Luo, Chenliang Li, “*Flow Matching based Sequential Recommender Model*”, 34th International Joint Conference on Artificial Intelligence (**IJCAI’2025**), CCF A.
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- Yuhao Wang, Junwei Pan, Pengyue Jia, Wanyu Wang, Maolin Wang, Zhixiang Feng, Xiaotian Li, Jie Jiang, **Xiangyu Zhao\***, “*PAD: Large Language Models Enhancing Sequential Recommendation*”, 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR’2025**), CCF A.
- Qidong Liu, **Xiangyu Zhao\***, Yejing Wang, Zijian Zhang, Howard Zhong, Chong Chen, Xiang Li, Wei Huang, Feng Tian, “*Bridge the Domains: Large Language Models Enhanced Cross-domain Sequential Recommendation*”, 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR’2025**), CCF A.
- Maolin Wang, Sheng Zhang, Ruocheng Guo, Wanyu Wang, Xuetao Wei, Zitao Liu, Hongzhi Yin, Yi Chang, **Xiangyu Zhao**, “*STAR-Rec: Making Peace with Length Variance and Pattern Diversity in Sequential Recommendation*”, 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR’2025**), CCF A.
- Bohan Hou, Haoqiang Lin, Xuemeng Song, Haokun Wen, Meng Liu, Yupeng Hu, **Xiangyu Zhao**, “*FiRE: Enhancing MLLMs with Fine-Grained Context Learning for Complex Image Retrieval*”, 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR’2025**), CCF A.
- Chaohua Yang, Dugang Liu, Xing Tang, Yuwen Fu, Xiuqiang He, **Xiangyu Zhao**, Zhong Ming, “*Multi-scenario Instance Embedding Learning for Deep Recommender Systems*”, 48th International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR’2025**), CCF A.
- Maolin Wang, **Xiangyu Zhao\***, “*MetaLoRA: Tensor-Enhanced Adaptive Low-Rank Fine-tuning*”, 40th IEEE International Conference on Data Engineering (**ICDE’2025**), PhD Symposium, CCF A.

- Wei Ni, Xiaoye Miao, **Xiangyu Zhao\***, Yangyang Wu, Yaoshu Wang, Jianwei Yin, “ZeroED: Hybrid Zero-Shot Error Detection with Large Language Model Reasoning”, 40th IEEE International Conference on Data Engineering (**ICDE’2025**), CCF A.
- Jingtong Gao, Bo Chen, **Xiangyu Zhao\***, Weiwen Liu, Xiangyang Li, Yichao Wang, Wanyu Wang, Huifeng Guo, Ruiming Tang, “LLM4Rerank: LLM-based Auto-Reranking Framework for Recommendations”, The Web Conference 2025 (**WWW’2025**), CCF A.
- Yejing Wang, Chi Zhang, **Xiangyu Zhao\***, QidongLiu, Maolin Wang, Xuetao Wei, Zitao Liu, Xing Shi, Yang Xudong, Ling Zhong, Wei Lin, “Behavior Modeling Space Reconstruction for E-Commerce Search”, The Web Conference 2025 (**WWW’2025**), CCF A.
- Jingtong Gao, Zhaocheng Du, Xiaopeng Li, **Xiangyu Zhao\***, Yichao Wang, Xiangyang Li, Huifeng Guo, Ruiming Tang, “SampleLLM: Optimizing Tabular Data Synthesis in Recommendations”, The Web Conference 2025 (**WWW’2025**), industry track, CCF A. **1 online launched system at Huawei**
- Wenxin Luo, Weirui Wang, Xiaopeng Li, Weibo Zhou, Pengyue Jia, **Xiangyu Zhao\***, “TAPO: Task-Referenced Adaptation for Prompt Optimization”, 50th International Conference on Acoustics, Speech, and Signal Processing (**ICASSP’2025**), CCF B.
- Xiao Han, Zijian Zhang, **Xiangyu Zhao\***, Yuanshao Zhu, Guojian Shen, Xiangjie Kong, Xuetao Wei, Liqiang Nie, Jieping Ye, “GARLIC: GPT-Augmented Reinforcement Learning with Intelligent Control for Vehicle Dispatching”, 39st AAAI Conference on Artificial Intelligence (**AAAI’2025**), CCF A. **Oral Presentation (4.6%)**
- Qidong Liu, Xian Wu, Wanyu Wang, Yejing Wang, Yuanshao Zhu, **Xiangyu Zhao\***, Feng Tian, Yefeng Zheng, “LLMEb: Large Language Model Can Be a Good Embedding Generator for Sequential Recommendation”, 39st AAAI Conference on Artificial Intelligence (**AAAI’2025**), CCF A. **Oral Presentation (4.6%)**
- Jiawei Cheng, Jingyuan Wang, Yichuan Zhang, Jiahao Ji, Yuanshao Zhu, Zhibo Zhang, **Xiangyu Zhao\***, “POI-Enhancer: An LLM-based Semantic Enhancement Framework for POI Representation Learning”, 39st AAAI Conference on Artificial Intelligence (**AAAI’2025**), CCF A. **Oral Presentation (4.6%)**
- Zijian Zhang, Shuchang Liu, Ziru Liu, Rui Zhong, Qingpeng Cai, **Xiangyu Zhao\***, Chunxu Zhang, Qidong Liu, Peng Jiang, “LLM-Powered Efficient User Simulator for Recommender System”, 39st AAAI Conference on Artificial Intelligence (**AAAI’2025**), CCF A. **Oral Presentation (4.6%)**
- Ziwei Liu, Qidong Liu, Yejing Wang, Wanyu Wang, Pengyue Jia, Maolin Wang, Zitao Liu, Yi Chang, **Xiangyu Zhao**, “SIGMA: Selective Gated Mamba for Sequential Recommendation”, 39st AAAI Conference on Artificial Intelligence (**AAAI’2025**), CCF A.
- Derong Xu, Xinhang Li, Ziheng Zhang, Zhenxi Lin, Zhihong Zhu, Zhi Zheng, Xian Wu, **Xiangyu Zhao\***, Tong Xu, Enhong Chen, “Harnessing Large Language Models for Knowledge Graph Question Answering via Adaptive Multi-Aspect Retrieval-Augmentation”, 39st AAAI Conference on Artificial Intelligence (**AAAI’2025**), CCF A.

- Wenlin Zhang, Chuhan Wu, Xiangyang Li, Yuhao Wang, Kuicai Dong, Yichao Wang, Xinyi Dai, **Xiangyu Zhao\***, Huifeng Guo, Ruiming Tang, “*LLMTreeRec: A Tree-based Large Language Model Framework for Cold-start Recommendation*”, 31st International Conference on Computational Linguistics (**COLING’2025**), CCF B.
- Qidong Liu, Xian Wu, **Xiangyu Zhao\***, Yejing Wang, Zijian Zhang, Feng Tian, Yefeng Zheng, “*LLM-ESR: Large Language Models Enhancement for Long-tailed Sequential Recommendation*”, 37th Annual Conference on Neural Information Processing Systems (**NeurIPS’2024**), accepted, CCF A. **Spotlight (3%)**
- Pengyue Jia, Yiding Liu, Xiaopeng Li, **Xiangyu Zhao\***, Yuhao Wang, Yantong Du, Xiao Han, Xuetao Wei, Shuaiqiang Wang, Dawei Yin, “*G3: An Effective and Adaptive Framework for Worldwide Geolocalization Using Large Multi-Modality Models*”, 37th Annual Conference on Neural Information Processing Systems (**NeurIPS’2024**), accepted, CCF A.
- Junlei Zhou, Jiashi Gao, **Xiangyu Zhao**, Xin Yao, Xuetao Wei, “*Association of Objects May Engender Stereotypes: Mitigating Association-Engendered Stereotypes in Text-to-Image Generation*”, 37th Annual Conference on Neural Information Processing Systems (**NeurIPS’2024**), accepted, CCF A. **Spotlight (3%)**
- Jiashi Gao, Ziwei Wang, **Xiangyu Zhao**, Xin Yao, Xuetao Wei, “*Does Egalitarian Fairness Lead to Instability? The Fairness Bounds in Stable Federated Learning Under Altruistic Behaviors*”, 37th Annual Conference on Neural Information Processing Systems (**NeurIPS’2024**), accepted, CCF A.
- Ziyi Zhou, Xinwei Guo, Jiashi Gao, **Xiangyu Zhao**, Shiyao Zhang, Xin Yao, Xuetao Wei, “*Seeing is NOT Always Believing! Unveiling the True Symmetric Moral Consistency of Large Language Models*”, 37th Annual Conference on Neural Information Processing Systems (**NeurIPS’2024**), accepted, CCF A.
- Derong Xu, Ziheng Zhang, Zhihong Zhu, Zhenxi Lin, Qidong Liu, Xian Wu, Tong Xu, **Xiangyu Zhao\***, Yefeng Zheng, Enhong Chen, “*Mitigating Hallucinations of Large Language Models in Medical Domain via Contrastive Decoding*”, The 2024 Conference on Empirical Methods in Natural Language Processing (**EMNLP’2024 Findings**), accepted, CCF B.
- Yejing Wang, Dong Xu, **Xiangyu Zhao\***, Zhiren Mao, Peng Xiang, Ling Yan, Yao Hu, Zijian Zhang, Xuetao Wei, Qidong Liu, “*GPreC: Bi-level User Modeling for Deep Recommender Systems*”, 24th International Conference on Data Mining (**ICDM’2024**), accepted, CCF B.
- Sheng Zhang, Maolin Wang, **Xiangyu Zhao\***, Ruocheng Guo, Yao Zhao, Chenyi Zhuang, Jinjie Gu, Zijian Zhang, Hongzhi Yin, “*DNS-Rec: Data-aware Neural Architecture Search for Recommender Systems*”, 18th ACM Conference on Recommender Systems (**RecSys’2024**), accepted, CCF B.
- Yuhao Wang, Yichao Wang, Zichuan Fu, Xiangyang Li, Wanyu Wang, Yuyang Ye, **Xiangyu Zhao\***, Huifeng Guo, Ruiming Tang, “*LLM4MSR: An Effective Efficient Interpretable LLM-Enhanced Paradigm for Multi-Scenario Recommendation*”, 33rd ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.

- Jingtong Gao, Bo Chen, Menghui Zhu, **Xiangyu Zhao\***, Xiaopeng Li, Yuhao Wang, Yichao Wang, Huifeng Guo, Ruiming Tang, “*HierRec: Scenario-Aware Hierarchical Modeling for Multi-scenario Recommendations*”, 33rd ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B. **1 online launched system at Huawei**
- Derong Xu, Ziheng Zhang, Zhihong Zhu, Zhenxi Lin, Qidong Liu, Xian Wu, Tong Xu, Wanyu Wang, Yuyang Ye, **Xiangyu Zhao\***, Yefeng Zheng, Enhong Chen, “*Editing Factual Knowledge and Explanatory Ability of Medical Large Language Models*”, 33rd ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.
- Langming Liu, Wanyu Wang, **Xiangyu Zhao**, Zijian Zhang, Chunxu Zhang, Shanru Lin, Yiqi Wang, Lixin Zou, Zitao Liu, Xuetao Wei, Hongzhi Yin, Qing Li, “*Efficient and Robust Regularized Federated Recommendation*”, 33rd ACM International Conference on Information and Knowledge Management (**CIKM’2024**), accepted, CCF B.
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- Xinhang Li, **Xiangyu Zhao\***, Yong Zhang, Chunxiao Xing, “*Towards Automatic ICD Coding via Knowledge Enhanced Multi-Task Learning*”, 32nd ACM International Conference on Information and Knowledge Management (**CIKM’2023**), 1238-1248, CCF B.
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- 2) Pan Yan, Zhaocheng Du, Qidong Liu, **Xiangyu Zhao**, Huifeng Guo, Ruiming Tang, “*Data processing method and device*”, China Patent, CN117217284A, 2023.
- 3) **Xiangyu Zhao**, Yejing Wang, Tong Xu, Xian Wu, Meng Zhang, “*Feature Selection Method, Device, Electronic Equipment and Storage Medium*”, China Patent, CN116933049A, 2023.

- 4) **Xiangyu Zhao**, Sida Wang, Huiji Gao, Bo Long, Bee-Chung Chen, Weiwei Guo, Jun Shi, “*Embedding optimization for machine learning models*”, US Patent, US20230124258A1, 2021.

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<b>TEACHING EXPERIENCE</b>	City University of Hong Kong	
	<b>Lecturer</b>	Sep 2025 - Dec 2025
	• Course: “SDSC4016 - <i>Fundamentals of Machine Learning II</i> ”, for undergraduate students	
	City University of Hong Kong	
	<b>Lecturer</b>	Jan 2025 - Apr 2025
	• Course: “SDSC4016 - <i>Fundamentals of Machine Learning II</i> ”, for undergraduate students	
	City University of Hong Kong	
	<b>Lecturer</b>	Jan 2025 - Apr 2025
	• Course: “SDSC6001 - <i>Statistical Machine Learning II</i> ”, for graduate students	
	City University of Hong Kong	
	<b>Lecturer</b>	Sep 2024 - Dec 2024
	• Course: “SDSC8007 - <i>Deep Learning</i> ”, for graduate students	
	City University of Hong Kong	
	<b>Lecturer</b>	Jan 2024 - Apr 2024
	• Course: “SDSC4016 - <i>Fundamentals of Machine Learning II</i> ”, for undergraduate students	
	City University of Hong Kong	
	<b>Lecturer</b>	Jan 2024 - Apr 2024
	• Course: “SDSC6001 - <i>Statistical Machine Learning II</i> ”, for graduate students	
	City University of Hong Kong	
	<b>Lecturer</b>	Sep 2023 - Dec 2023
	• Course: “SDSC8007 - <i>Deep Learning</i> ”, for graduate students	
	Chinese University of Hong Kong	
	<b>Guest Lecturer</b>	Mar 2023
	• Tutorial: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
	City University of Hong Kong	
	<b>Lecturer</b>	Jan 2023 - Apr 2023
	• Course: “SDSC4016 - <i>Fundamentals of Machine Learning II</i> ”, for undergraduate students	
	City University of Hong Kong	
	<b>Lecturer</b>	Jan 2023 - Apr 2023
	• Course: “SDSC6001 - <i>Statistical Machine Learning II</i> ”, for graduate students	
	East China Normal University	
	<b>Guest Lecturer</b>	Dec 2022
	• Topic: “ <i>Automated Machine Learning for Recommendations: Fundamentals and Advances</i> ”	
	City University of Hong Kong	
	<b>Lecturer</b>	Jan 2022 - Apr 2022
	• Course: “SDSC8007 - <i>Deep Learning</i> ”, for graduate students	

Leiphone Online Course  
**Online Lecturer** Nov 2018  
 • Course: “*Deep Reinforcement Learning for E-commerce*”

University of Science and Technology of China  
**Teaching Assistant** Sep 2015 - Jan 2016  
 • Course: “*Machine Learning and Knowledge Discovery*”, for graduate students

University of Electronic Science and Technology of China  
**Teaching Assistant** Jan 2013 - Jun 2013  
 • Course: “*Computer Science Research*”, for undergraduate students

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INVITED TALKS	Lenovo	
	<b>Invited Talk</b>	Aug 2025
	• Tutorial: “ <i>A Survey of Personalization: From RAG to Agent</i> ”	
	Huawei HK	
	<b>Invited Talk</b>	Aug 2025
	• Tutorial: “ <i>A Survey of Personalization: From RAG to Agent</i> ”	
	Tencent	
	<b>Invited Talk</b>	Jun 2025
	• Tutorial: “ <i>A Survey of Personalization: From RAG to Agent</i> ”	
	KDD Finance Day 2024 @ KDD’24	
	<b>Invited Talk</b>	Aug 2024
	• Topic: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
	Huawei HK	
	<b>Invited Talk</b>	May 2024
	• Tutorial: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
	The 29th ACM SIGKDD Conference on Knowledge Discovery and Data (KDD’2023)	
	<b>Conference Tutor</b>	Aug 2023
	• Tutorial: “ <i>Trustworthy Recommender Systems</i> ”	
	The 30th International Joint Conference on Artificial Intelligence (IJCAI’2023)	
	<b>Conference Tutor</b>	Aug 2023
	• Tutorial: “ <i>Joint Modeling in Recommendations: Foundations and Frontiers</i> ”	
	The 30th International Joint Conference on Artificial Intelligence (IJCAI’2023)	
	<b>Conference Tutor</b>	Aug 2023
	• Tutorial: “ <i>Trustworthy Recommender Systems</i> ”	
	Baidu	
	<b>Invited Talk</b>	Jul 2023
	• Tutorial: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
	The Web Conference 2023 (WWW’23)	
	<b>Conference Tutor</b>	May 2023
	• Tutorial: “ <i>Trustworthy Recommender Systems</i> ”	

Beihang University	
<b>Invited Talk</b>	Mar 2023
• Tutorial: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
The 16th ACM International WSDM Conference (WSDM’23)	
<b>Conference Tutor</b>	Feb 2023
• Tutorial: “ <i>Automated Machine Learning for Recommendations: Fundamentals and Advances</i> ”	
Tencent	
<b>Invited Talk</b>	Nov 2022
• Topic: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
DLP Workshop @ KDD’22	
<b>Keynote Talk</b>	Aug 2022
• Topic: “ <i>Automated Machine Learning for Recommendations: Fundamentals and Advances</i> ”	
East China Normal University	
<b>Invited Talk</b>	May 2022
• Topic: “ <i>Deep Reinforcement Learning based Recommendations</i> ”	
Shein	
<b>Invited Talk</b>	May 2022
• Topic: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
Harbin Engineering University	
<b>Invited Talk</b>	May 2022
• Topic: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
The Web Conference 2022 (WWW’22)	
<b>Conference Tutor</b>	Apr 2022
• Tutorial: “ <i>Automated Machine Learning for Recommendations: Fundamentals and Advances</i> ”	
Bytedance	
<b>Invited Talk</b>	Dec 2021
• Topic: “ <i>Adaptive and Automated Deep Recommender Systems</i> ”	
National University of Singapore	
<b>Invited Talk</b>	Dec 2021
• Topic: “ <i>Deep Reinforcement Learning based Recommendations</i> ”	
International Joint Conference on Artificial Intelligence 2021 (IJCAI’21)	
<b>Conference Tutor</b>	Aug 2021
• Tutorial: “ <i>Deep Learning for Recommendations: Fundamentals and Advances</i> ”	
The Web Conference 2021 (WWW’21)	
<b>Conference Tutor</b>	Apr 2021
• Tutorial: “ <i>Deep Recommender System: Fundamentals and Advances</i> ”	
Noah’s Ark Lab, Huawei	
<b>Invited Talk</b>	Dec 2020
• Topic: “ <i>Automated Machine Learning (AutoML) based Recommendations</i> ”	

East China Normal University	
<b>Invited Talk</b>	Nov 2019
• Topic: <i>“Urban Security and Crime Prediction”</i>	
Shandong University	
<b>Invited Talk</b>	Sep 2019
• Topic: <i>“Deep Reinforcement Learning for Online Advertising”</i>	
TAL Education Group	
<b>Invited Talk</b>	Aug 2019
• Topic: <i>“Deep Reinforcement Learning based Recommendations”</i>	
Beijing University of Chemical Technology	
<b>Invited Talk</b>	Jul 2019
• Topic: <i>“Urban Security and Crime Prediction”</i>	
Leiphone Online Course	
<b>Online Lecturer</b>	Nov 2018
• Course: <i>“Deep Reinforcement Learning for E-commerce”</i>	
Kuaishou.com	
<b>Invited Talk</b>	Aug 2018
• Topic: <i>“Deep Reinforcement Learning based Recommendations”</i>	

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## BIOGRAPHY

**Prof. Xiangyu Zhao** is a tenured associate professor of data science at City University of Hong Kong (CityU). He is designated as the CityU Thetos Young Scholar (two awardees per year). He worked as an assistant professor at CityU from Sep 2021, and then got an early promotion in July 2025. Prior to CityU, he completed his PhD (2021) at MSU, MS (2017) at USTC and BEng (2014) at UESTC. His current research interests include data mining and machine learning, especially (1) Personalization, Recommender System, Online Advertising, Search Engine, and Information Retrieval; (2) Large Language Models, Deep Reinforcement Learning, AutoML, Trustworthy AI and Multimodal ML; and (3) AI for Urban Computing, Smart City, Healthcare, Education.

He has published more than 200 (120+ CCF-A and 50+ CCF-B) papers in top conferences (KDD, WWW, AAAI, SIGIR, IJCAI, ICDE, CIKM, ICDM, WSDM, RecSys, ICLR, etc) and journals (TKDE, TKDD, TOIS, SIGKDD, SIGWeb, etc). His research has been awarded KDD'25 Best Paper Award Runner Up, ICDM'22 and ICDM'21 Best-ranked Papers, 2021 Joint AAAI/ACM SIGAI Doctoral Dissertation Award Nomination, Global Chinese AI Rising Stars, Hong Kong RGC Key Projects Collaborative Research Fund (7.6 million HKD, the ONLY assistant professor in Engineering) and Research Impact Fund (7 million HKD, the ONLY assistant professor since 2020), CCF-Tencent Open Fund (twice), Huawei Innovation Research Program (twice), Tencent Focused Research Fund (twice), CCF-Alimama Research Fund, Huawei Young Scholar Funding Scheme, Kuaishou Consultation Service, HKIDS Early Career Research Grant, and MSU Dissertation Fellowship. He guided the students to win the NeurIPS Competition 2024 Champion (1/1500+ global teams), and KDD Cup 2024 Runner Up (2/500+ global teams). He is the awardee of the CityU Outstanding Research Award and Thetos Young Scholar Award (two assistant professor awardees per year). He is among the Stanford World's Top 2% Scientists in 2024-2025.

He serves as top-tier data science and AI conference chairs (e.g., WWW'25, IEEE ICICIP'25, ISNN'25, APWeb-WAIM'24, NLPCC'24, ADC'24), (senior) area chair and program committee members (e.g., KDD, WWW, SIGIR, IJCAI, AAAI, ICML, ICLR), and journal editors and reviewers (e.g., TKDE, TKDD, TOIS, TIST, CSUR, Frontiers in Big Data, Neural Networks). He serves as the organizers of DRL4KDD@KDD'19/WWW'21, DRL4IR@SIGIR'20-22/CIKM'23, DLP@RecSys'23, RWGM@WWW'24, AgentIR@SIGIR'24-25, TrustKDD@CIKM'25, and a lead tutor at KDD'23/25, WWW'21/22/23, IJCAI'21/23 and WSDM'23, etc. He also serves as the founding academic committee members of MLNLP, the largest Chinese AI community with millions of subscribers. The models and algorithms from his research have been launched in the online system of many companies. Please find more information at <https://zhaoxyai.github.io/>.