

QIDONG LIU

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EDUCATION

- City University of Hong Kong**, Hong Kong SAR, China Aug 2022 - Present
Joint Ph.D., Data Science
Supervisor: Dr. Xiangyu Zhao [[HOMEPAGE](#)]
Lab: AML Lab [[HOMEPAGE](#)]
Affiliation: School of Data Science
GPA: 3.80/4.0
- Xi'an Jiaotong University**, Xi'an, China Mar 2021 - Present
Ph.D., Automation
Supervisor: Prof. Feng Tian [[HOMEPAGE](#)]
Lab: XJTU-MKFE [[HOMEPAGE](#)]
Affiliation: The Faculty of Electronic Information
GPA: 90.92/100
- Xi'an Jiaotong University**, Xi'an, China Sep 2019 - Jan 2021
M.Sc., Cyberspace Security
Supervisor: Prof. Feng Tian
GPA: 90.07/100 (Top 2)
- Xi'an Jiaotong University**, Xi'an, China Sep 2015 - Jun 2019
B.Eng., Automation
GPA: 85.9/100
Graduation Thesis: Analysis of motion sensor on mobile terminal and design of Wechat Mini Programme

RESEARCH INTERESTS

- **Recommendation:** Pre-training, Sequential, Debias
- **Large Language Model:** Multi-task, Applications
- **Causal Inference:** Treatment Effect Estimation
- **Data Mining for Applications:** Smart Education, Intelligent Healthcare

PUBLICATIONS

[\[Google Scholar\]](#)

(* represents the corresponding author, † represents equal contribution.)

[C7]. **Qidong Liu**, Fan Yan, Xiangyu Zhao*, Zhaocheng Du, Huifeng Guo, Ruiming Tang and Feng Tian. Diffusion Augmentation for Sequential Recommendation. *The 32nd International Conference on Information and Knowledge Management (CIKM'23, CCF-B Conference)*.

[J4]. **Qidong Liu**, Feng Tian*, Qinghua Zheng and Qianying Wang, Disentangling Interest and Conformity for Eliminating Popularity Bias in Session-Based Recommendation. *Knowledge and Information Systems (KAIS'23, CCF-B Journal)*. [[PDF](#)]

[J3]. **Qidong Liu**[†], Jiayi Hu[†], Yutian Xiao[†], Jingtong Gao and Xiangyu Zhao*, Multimodal Recommender Systems: A Survey, *arXiv preprint arXiv:2302.03883*. [[PDF](#)]

- [C6]. **Qidong Liu**, Feng Tian*, Weihua Ji and Qinghua Zheng. "A New Representation Learning Method for Individual Treatment Effect Estimation: Split Covariate Representation Network" *The 12th Asian Conference on Machine Learning (ACML'20, CCF-C Conference)*. [\[PDF\]](#)
- [C5]. Chengxi Li[†], Yejing Wang[†], **Qidong Liu**[†], Xiangyu Zhao*, Wangyu Wang, Yiqi Wang, Lixin Zou, Wenqi Fan and Qing Li. "STRec: Sparse Transformer for Sequential Recommendations" *The 17th ACM Conference on Recommender Systems (RecSys'23, CCF-B Conference)*.
- [C4]. Zijian Zhang, Xiangyu Zhao*, **Qidong Liu**, Chunxu Zhang, Qian Ma, Wanyu Wang, Hongwei Zhao, Yiqi Wang and Zitao Liu, Prompt-Enhanced Spatio-Temporal Multi-Attribute Prediction. *The 32nd International Conference on Information and Knowledge Management (CIKM'23, CCF-B Conference)*.
- [C3]. Yuhao Wang, Xiangyu Zhao*, Bo Chen, **Qidong Liu**, Huifeng Guo, Huanshuo Liu, Yichao Wang, Rui Zhang and Ruiming Tang, PLATE: A Prompt-enhanced Paradigm for Multi-Target Cross-Domain Recommendation, *The 46th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR'23, CCF-A Conference)*. [\[PDF\]](#)
- [C2]. Fang Nan, Feng Tian*, Yaozhi Wang, **Qidong Liu**, Yanze Wu, Jizhong Zhang, Huan Li, Haiping Zhu, Yuzhe Yao, Heng Zhang, Yaqiang Wu and Qinghua Zheng. Inferring Actions and Joint Attention From Dual-view Classroom Videos, *AAAI 2023 Workshop Artificial Intelligence for Education (AI4Edu'23)* [\[PDF\]](#)
- [J2]. Wenqi Fan, Xiangyu Zhao*, Xiao Chen, Jingran Su, Jingtong Gao, Lin Wang, **Qidong Liu**, Yiqi Wang, Han Xu, Lei Chen, Qing Li, A Comprehensive Survey on Trustworthy Recommender Systems. *arXiv preprint arXiv:2209.10117*. [\[PDF\]](#)
- [J1]. Haiping Zhu, Chengcheng Zhao, **Qidong Liu**, Qinghua Zheng, Jiangwei Zeng, Feng Tian* and Yan Chen, Reciprocal-Constrained Interpretable Job Recommendation. *Journal of Computer Research and Development*, 2021, 58(12): 2660-2672. (CCF-A Chinese Journal) [\[PDF\]](#)
- [C1]. Chen, Yan, Jiangwei Zeng, Haiping Zhu, Feng Tian*, Yu Liu, **Qidong Liu** and Qinghua Zheng. "A Behavior-Item Based Hybrid Intention-Aware Frame for Sequence Recommendation." *International Conference on e-Business Engineering. Springer, Cham, 2019*. (ICEBE'19) [\[PDF\]](#)

COMPETITIONS

- The 7th Place in TianChi CCKS2023-PromptCBLUE Competition (Common Channel) [\[CODE\]](#) [\[RANK\]](#) 2023
- The 3rd Place in YIDIANZIXUN Code Competition (CTR prediction channel). [\[CODE\]](#) [\[RANK\]](#) 2021

AWARDS

- IJCAI Travel Grant Award 2023
- Graduate Student First-class Academic Scholarship 2020
- Outstanding Graduate Award of XJTU 2020
- XJTU Siyuan Scholarship 2017

INTERNSHIP

Tencent Jarvis Lab

May 2023 - Now

- Large Language Models for Medical Applications

PROJECTS

Diffusion Augmentation for Sequential Recommendation (with Huawei Noah's Ark) Feb 2023 - Jun 2023

- **Mentor:** Fan Yan & Zhaocheng Du
- We design a Diffusion Model based augmentation method for sequential recommendation.
- We conduct comprehensive experiments on three datasets and three SRS backbones to illustrate the efficiency and flexibility of the method.

- The paper is submitted to CIKM'23.

Medication Recommendation for Multi-center Hospital (with Tencent Jarvis Lab) Aug 2022 - Nov 2022

- **Mentor:** Zhaopeng Qiu [\[HOMEPAGE\]](#)
- We constructed a contrastive pretrain model with prompt tuning for multi-center medication recommendation.
- We achieved SOTA performance compared with advanced medication recommendation models and multi-domain recommendation methods.
- The paper is submitted to TOIS.

Employment Recommendation for undergraduate (with XJTU Job Center) 2020 - 2021

- We collected five-year employment data of undergraduate in XJTU.
- We proposed a reciprocal-constrained employment recommendation model based on multi-task learning.
- The model gives service to undergraduate in XJTU.

Micro-grid Load Prediction (with TEBA) 2019 - 2020

- We constructed a LSTM-based and Multi-source Data Fusion model for load prediction.
- We achieved 95% accuracy under 20%EP standard and the model is applied in real production environment.
- I completed a patent draft.

TEACHING EXPERIENCE

- The ACM Web Conference May 2023
Tutorial Speaker: Trustworthy Recommender Systems [\[website\]](#)
- Hong Kong Institute for Data Science Mar 2023
Invited Talk: Pretrain Model for Multi-center Medication Recommendation [\[POSTER\]](#)
- National University of Defense Technology Jul 2021
Invited Talk: Intelligent Tutor System
- Xi'an Jiaotong Univeristy Feb 2020 - Jun 2020
Teaching Assistant: Big Data analytic and knowledge discovery

SERVICES

Journal Reviewer

- IEEE Transactions on Knowledge and Data Engineering (TKDE) 2023
- IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI) 2023

Program Chair & Conference Reviewer

- AAAI Conference on Artificial Intelligence (AAAI) 2024
- ACM SIGIR Conference on Information Retrieval in the Asia Pacific (SIGIR-AP) 2023
- ACM International Conference on Multimedia (MM) 2023
- ACM Conference on Recommender Systems (RecSys) 2023
- ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD) 2023
- IEEE International Conference on Data Mining (ICDM) 2022

[Update on August 2023]