



Zijian Zhang

Second-Year Ph.D. Candidate
Room A217, Computer Building, Jilin University
No.2699 Qianjin Street, Changchun, China

+86 157 5431 0579
✉ zhangzj2114@mails.jlu.edu.cn
🌐 Personal Homepage
🌐 LinkedIn Profile

EDUCATION

- School of Data Science, City University of Hong Kong, Joint Ph.D. 2022-2025(*expected*)
- College of Computer Science and Technology, Jilin University, Ph.D. 2021-2025(*expected*)
- College of Computer Science and Technology, Jilin University, M.E. 2018-2021
- College of Computer Science and Technology, Jilin University, B.E. 2014-2018

RESEARCH INTEREST

Spatio-Temporal Data Mining, Urban Computation, Recommender System

PUBLICATIONS

•First author

- **Zijian Zhang**, Xiangyu Zhao, Hao Miao, Chunxu Zhang, Hongwei Zhao, Junbo Zhang, Automated Spatio-Temporal Multi-Task Learning, *The 37th AAAI Conference on Artificial Intelligence, AAAI'2023* [Paper]
Summary: We establish a multi-task framework with adaptive spatio-temporal prediction operations optimized by AutoML to solve spatio-temporal multi-task learning.
- Muyang Li*, **Zijian Zhang***, Xiangyu Zhao, Minghao Zhao, Runze Wu, Ruocheng Guo, AutoMLP: Automated MLP for Sequential Recommendations, *The Web Conference 2023, WWW'2023* [Paper]
Summary: We construct an MLP-based framework to tackle sequential recommendation and address long- and short-term interest with AutoML.
- **Zijian Zhang**, Xiangyu Zhao, Qidong Liu, Chunxu Zhang, Qian Ma, Hongwei Zhao, Prompt-Enhanced Spatio-Temporal Multi-Attribute Prediction, *The 32nd ACM International Conference on Information and Knowledge Management, CIKM'2023*
Summary: We devise an effective and efficient pretrain-prompt training pattern with spatio-temporal transformer and two kinds of prompt tokens for spatio-temporal multi-attribute prediction.
- Qian Ma*, **Zijian Zhang***, Xiangyu Zhao, Haoliang Li, Hongwei Zhao, Hierarchical Information Enhanced Traffic Forecasting, *The 32nd ACM International Conference on Information and Knowledge Management, CIKM'2023*
Summary: We propose to rethink the modeling of sensor relationships by devising two hierarchical perspectives to offer common and representative spatio-temporal patterns.
- **Zijian Zhang***, Ze Huang*, Zhiwei Hu*, Xiangyu Zhao, Wanyu Wang, Zitao Liu, Junbo Zhang, S. Joe Qin, Hongwei Zhao, *The 32nd ACM International Conference on Information and Knowledge Management, CIKM'2023*
Summary: We build an MLP-based framework with multiple temporal dependencies to solve spatio-temporal prediction with linear computational complexity.
- Hongwei Zhao(Supervisor), **Zijian Zhang**, Haoyu Zhao, Jiao Li, Huangshui Hu, Qingliang Li, Xing Li, Yuan Zhang, Lili Fan, Pingping Liu, An RFID Anti-collision Algorithm Based on Bidirectional Segmented Query, *CN201911033349.4, China, Patent*
Summary: We invent an efficient anti-collision algorithm to eliminate vacant slots during RFID query and immensely improve the system throughput rate.

•Co-author

- Chunxu Zhang, Guodong Long, Tianyi Zhou, Peng Yan, **Zijian Zhang**, Chengqi Zhang, Bo Yang, Dual Personalization on Federated Recommendation, *The 32nd International Joint Conference on Artificial Intelligence, IJCAI'2023*
- Jiahao Liang, Xiangyu Zhao, Muyang Li, **Zijian Zhang**, Haochen Liu, Liu Zitao, MMMLP: Multi-modal Multi-layer Perceptron for Sequence Recommendation, *The Web Conference 2023, WWW'2023*
- Kesen Zhao, Xiangyu Zhao, **Zijian Zhang**, Muyang Li, Storage-saving Transformer for Sequential Recommendations, *The 31st ACM International Conference on Information and Knowledge Management, CIKM'2022*
- Chunxu Zhang, Ximing Li, **Zijian Zhang**, Jiaxu Cui, Bo Yang, BO-Aug: Learning Data Augmentation Policies via Bayesian Optimization, 2022, *Applied Intelligence* [JCR Q2]

AWARDS AND ACHIEVEMENTS

- Third place in Carbon Neutral Competition track of 3rd Shandong Data Competition 2022
- Outstanding graduate student, Jilin University 2021
- Second prize of 'Huawei Cup' The 17th China Post-Graduate Mathematical Contest 2020
- Scholarship of outstanding post-graduate, Jilin University 2019

- Academic performance scholarship of post-graduate, Jilin University 2019
- Third class scholarship, Jilin University 2018
- College excellent student, Jilin University 2018
- First prize in Jilin Province of Contemporary Undergraduate Mathematical Contest 2016

ACADEMIC EXPERIENCES

- Student physical fitness monitoring system based on smart bracelet** Aug 2018-Nov 2019
Supervisor : Prof.Hongwei Zhao

- Design and implement a novel anti-collision algorithm in radio frequency identification system (In-dependently)
- Design and implement the device information management system in Java (Teamwork)

TECHNICAL SKILLS AND INTERESTS

Languages: Chinese (native), English (fluent).

Developer Tools: Python, Java.

Soft Skills: Leadership, Communication, Resilience, and Collaboration.

CONFERENCE EXTERNAL REVIEWER

- KDD'22
- ECMLPKDD'22
- CIKM'22