Yaokun Liu

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EDUCATION

University of Illinois Urbana-Champaign — Champaign, IL

Ph.D. in Information Science — 2024–Present

- **Advisor:** Prof. Dong Wang
- **Research:** Trustworthiness and Explainability of LLMs, Uncertainty Quantification, Information Retrieval

Tianjin University — Tianjin, China

M.Eng. in Computer Science — 2021–2024

- **Thesis:** Co-occurrence Embedding Enhancement for Multi-interest Recommendation
- **Advisor:** Prof. Xiaowang Zhang
- **Research:** Information Retrieval, Recommender System

University of Science and Technology Beijing — Beijing, China

B.Sc. in Intelligence Science and Technology — 2017–2021

- **Courses:** Probability and Mathematical Statistics, Fundamentals of Programming, Foudation of Machine Learning, Pattern Recognition, Machine Intelligence

PUBLICATIONS

1. **Mind the Ambiguity: Aleatoric Uncertainty Quantification in LLMs for Safe Medical Question Answering**
   Yaokun Liu, Yifan Liu, Phoebe Mbuvi, Zelin Li, Ruichen Yao, Gawon Lim and Dong Wang *In Proceedings of the ACM Web Conference (WWW), 2026.*

2. **Attribute Simulation for Item Embedding Enhancement in Multi-Interest Recommendation**
   Yaokun Liu, Xiaowang Zhang, Minghui Zou and Zhiyong Feng. *In the 17th ACM International Conference on Web Search and Data Mining (WSDM)*, 2024. [Paper] [Code]

3. **Co-Occurrence Embedding Enhancement for Long-Tail Problem in Multi-Interest Recommendation**
   Yaokun Liu, Xiaowang Zhang, Minghui Zou and Zhiyong Feng. *In the 17th ACM Conference on Recommender Systems (RecSys)*, 2023. [Paper]

4. **Red-Teaming Privacy-Protective Perturbations: Blind Face Restoration as an Attack Strategy**
   Zelin Li, Yifan Liu, Huimin Zeng, **Yaokun Liu**, Ruichen Yao, Yang Zhang and Dong Wang. *In Proceedings of the ACM Web Conference (WWW), 2026.* [Paper] [Code]

5. **Modality Interactive Mixture-of-Experts for Fake News Detection**
   Yifan Liu, **Yaokun Liu**, Zelin Li, Ruichen Yao, Yang Zhang and Dong Wang. *In Proceedings of the ACM Web Conference (WWW), 2025.* [Paper]

6. **Component-Based Fairness in Face Attribute Classification with Bayesian Network-informed Meta Learning**
   Yifan Liu, Ruichen Yao, **Yaokun Liu**, Ruohan Zong, Zelin Li, Yang Zhang and Dong Wang. *In the ACM Conference on Fairness, Accountability, and Transparency (FAccT), 2025.* [Paper]

7. **Anti-Tamper Protection for Unauthorized Individual Image Generation**
   Zelin Li, Ruohan Zong, Yifan Liu, Ruichen Yao, **Yaokun Liu**, Yang Zhang and Dong Wang. *In the International Conference on Computer Vision (ICCV), 2025.* [Paper]

PREPRINTS

1. **Learning Decomposed Contextual Token Representations from Pretrained and Collaborative Signals for Generative Recommendation**
   Yifan Liu, **Yaokun Liu**, Zelin Li, Zhenrui Yue, Gyuseok Lee, Ruichen Yao, Yang Zhang and Dong Wang. *Under review, arXiv preprint, 2025*. [Paper]

2. **Session-Based Recommendation with Validated and Enriched LLM Intents**
   Gyuseok Lee, **Yaokun Liu**, Yifan Liu, Susik Yoon, Dong Wang and SeongKu Kang. *Under review, arXiv preprint, 2025*. [Paper]

3. **MASH: A Multiplatform and Multimodal Annotated Dataset for Societal Impact of Hurricane**
   Ruichen Yao, Aslanbek Murzakhmetov, Raaghav Pillai, Aliya Maussymbayeva, Zelin Li, Yifan Liu, **Yaokun Liu**, Lanyu Shang, Yang Zhang, Na Wei and others. *arXiv preprint*, 2025. [Paper]

TEACHING

- UIUC IS 206: Introduction to Database Concepts and Applications   Fall 2025
  Teaching Assistant
- UIUC IS 517: Methods of Data Science   Spring 2026
  Teaching Assistant

SERVICE

- **Reviewer:** WWW, KDD, International Joint Conference on Knowledge Graphs, IEEE Transactions on Big Data, World Wide Web Journal, Journal of Frontiers of Computer Science and Technology

AWARDS

- Illinois Distinguished Fellowship (3-year)   2025–2028
- Tianjin University Graduate Academic Scholarship)   2022, 2023, 2024
- USTB Academic Scholarship   2019, 2020, 2021
- Sanjin Scholarship   2018

SKILLS

- **Tool Kits:** Git, Docker, Conda, LaTeX
- **Programming Languages:** Python, C/C++, Matlab, Bash/Zsh
- **Machine Learning Frameworks:** PyTorch, TensorFlow
- **Languages:** English (fluent), Chinese (native)