

Xiaoyu Zhang

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EDUCATION

School of Computer Science and Technology, Shandong University

Qingdao, China

Master of Electronic Information in Computer Technique

Sep 2021 — Jun 2024

- GPA: 88.25/100.
- Key Courses: Machine learning (94); Social media analysis (96); Advanced algorithm (88).

School of Computer Science and Technology, Shandong University

Qingdao, China

Bachelor of Engineering in Computer Science and Technology

Sep 2017 — Jun 2021

- GPA: 89.87/100 (Ranking: 14/157).
- Key Courses: Information retrieval (95); Artificial intelligence (99); Human-computer interaction (89).

PUBLICATIONS

- [1] **Xiaoyu Zhang**, Ruobing Xie, Yougang Lyu, Xin Xin, *et al.*, “Towards empathetic conversational recommender systems,” in *Proceedings of the RecSys, Bari, Italy, 2024* (Full track, **Best Full Paper Award**). DOI: 10.1145/3640457.3688133.
- [2] **Xiaoyu Zhang**, Xin Xin, Dongdong Li, Wenxuan Liu, *et al.*, “Variational reasoning over incomplete knowledge graphs for conversational recommendation,” in *Proceedings of the WSDM, Singapore, 2023* (Full track). DOI: 10.1145/3539597.3570426.
- [3] **Xiaoyu Zhang**, Dongdong Li, Pengjie Ren, Zhumin Chen, *et al.*, “Memory networks based knowledge aware medical dialogue generation,” *Journal of Computer Research and Development*, vol. 59, no. 12, pp. 2889–2900, 2022. DOI: 10.7544/issn1000-1239.20210851.
- [4] Yougang Lyu, **Xiaoyu Zhang**, Zhaochun Ren, and Maarten de Rijke, “Cognitive biases in large language models for news recommendation,” in *Proceedings of the ROEGEN@RecSys, Bari, Italy, 2024*. DOI: 10.48550/arXiv.2410.02897.
- [5] Yougang Lyu, **Xiaoyu Zhang**, Lingyong Yan, Maarten de Rijke, *et al.*, “Deepshop: A benchmark for deep research shopping agents,” *submitted to NeurIPS 2025 (Datasets & Benchmarks Track)* (Under Review). DOI: 10.48550/arXiv.2506.02839.

RESEARCH EXPERIENCES

Leiden Institute of Advanced Computer Science, Leiden University.

Leiden, Netherlands

Research assistant, Supervisors: Dr. Zhaochun Ren.

Jun 2024 — Aug 2024

- Contribution: Discussion and writing.
- Explore cognitive biases in large language model(LLM)-based news recommender systems(RSs) and discuss strategies to mitigate these effects.[4].

Weixin Group, Tencent Inc.

Beijing, China

Internship, Supervisors: Dr. Zhaochun Ren, Ruobing Xie.

Jun 2023 — Feb 2024

- Contribution: Conceptualization, methodology, data collection, experiments, and writing.
- Propose a novel empathetic Conversational Recommender System(CRS) using LLMs to align with user needs, improve recommendation accuracy, and enhance user satisfaction[1].

School of Computer Science and Technology, Shandong University.

Qingdao, China

Project Participant, Supervisors: Dr. Zhaochun Ren, Dr. Xin Xin.

Sep 2021 — Dec 2022

- Contribution: Conceptualization, methodology, experiments, and writing.
- Propose a variational reasoning approach to enhance the original incomplete and noisy knowledge graphs(KGs) involved in CRSs and perform dynamic knowledge reasoning conditioned on dialogue.[2].

NLP and KG Department, Baidu Inc.

Beijing, China

Internships, Supervisor: Dr. Wei Li.

May 2022 — Feb 2023

- Construct multimodal news data and train a subjective-objective news evaluation metric mapping model.
- Develop an efficient news text-cleaning strategy for digital hosts on Baidu's social media platform. The strategy achieved a 98% pass rate in human evaluation.

School of Computer Science and Technology, Shandong University.

Qingdao, China

Research Assistant, Supervisors: Dr. Zhaochun Ren.

Sep 2020 — Aug 2021

- Contribution: Conceptualization, methodology, experiments, and writing.
- Propose a medical dialogue generation method using knowledge-aware memory networks to improve response quality on diversity and correctness.[3].

SCHOLARSHIPS & AWARDS

- **Best Full Paper Award**, The 18th ACM Conference on Recommender Systems 2024. Oct 2024
- The Rhino-Bird Research Elite, Tencent Inc. Aug 2024
- Dean's scholarship (10,000 RMB), Shandong University. Dec 2023
- First-class academic scholarship (8,000 RMB, performance top 10%), Shandong University. Dec 2023
- Outstanding postgraduate, Shandong University. Nov 2023
- First-class academic scholarship (8,000 RMB, performance top 1%), Shandong University. Dec 2020
- Honorable Mention of the Mathematical Contest in Modeling. May 2023

TALKS

Invited Talks:

- **University of Glasgow**, Online. Jan 2025
Title: Enhancing CRSs: Integrating Knowledge, Context, and Emotions.
- **ByteDance Inc.**, Online. Nov 2024
Title: User-centric Conversational Recommender Systems.

Conference Oral Presentations:

- **RecSys 2024**, Bari, Italy. Oct 2023
Title: Towards Empathetic Conversational Recommender Systems.
- **WSDM 2023**, Singapore. Feb 2023
Title: Variational Reasoning over Incomplete Knowledge Graphs for Conversational Recommendation.

ACADEMIC SERVICE

- **Journal Reviewers:** TKDE 2025/2024, IPM 2023.
- **PC Members:** SIGIR 2025, CCIR 2024.

TEACHING EXPERIENCES

School of Computer Science and Technology, Shandong University

Qingdao, China

Teaching Assistant, Course: Introduction to Data Science(Spring).

2021 — 2023

- Responsibility: Design laboratory experiments, teach all laboratory sections(Over 30 undergraduate students annually), create exam questions, grade lab reports and exams.

SKILLS

- **Programm skills:** Python (Top 4.3% in Certified Software Professional, China Computer Federation), LATEX, PyTorch.
- **Languages:** Chinese[native], English[IELTS 7.0 (Listening:7.5, Reading:7.0, Writing:7.0, Speaking:6.0)].