

Weiying Luo

☎ +86 188 5175 9801 | ✉ wqluo@smail.nju.edu.cn | 🌐 GitHub | 📍 Nanjing, China

EDUCATION

Nanjing University

M.Sc. in Computer Science

Advised by Prof. Gong Cheng

Sep 2022 – Jun 2025

GPA: 90.83/100

Nanjing University

B.Sc. in Computer Science

Selected for the Elite Program in Computer Science

Sep 2018 – Jun 2022

GPA: 4.45/5.0

RESEARCH INTERESTS

My research focuses on **large language models**, **multimodal learning**, and **data mining**. Currently, I am working on enhancing multimodal large language models, specifically tackling challenges in adapting to varied image resolutions. I have previously contributed to projects on recommender systems and dataset retrieval, utilizing knowledge graphs and information retrieval techniques. I am always open to exploring new ideas and research directions.

EXPERIENCE

The University of North Carolina at Chapel Hill

UNITES Lab, Research Assistant

Remote

Jun 2024 – Oct 2024

- Conducted research on adapting visual large language models (VLLMs) to handle various input image resolutions, under the supervision of Prof. Tianlong Chen.
- Results documented in a manuscript submitted to the ACL Rolling Review.

Tencent

WeChat Machine Learning Application Group, Research Intern

Shenzhen, China

Jul 2023 – May 2024

- Developed LLM-driven methods to improve recommender systems, successfully deployed within the WeChat Subscriptions platform.
- Published key findings in a [preprinted paper](#).

SenseTime

Decision Intelligence Group, Research Intern

Shenzhen, China

Jan 2022 – Jul 2022

- Participated in the development of [DI-engine](#), a general decision intelligence engine.
- Assisted in reinforcement learning research on complex action space.

ByteDance

TikTok Recommendation Group, Backend Engineer Intern

Shanghai, China

Jul 2021 – Sep 2021

- Developed and maintained an in-house dashboard debugger.
- Assisted in improving the stability of TikTok's live streaming services.

PUBLICATIONS

An Empirical Investigation of Implicit and Explicit Knowledge-Enhanced Methods for Ad Hoc Dataset Retrieval

The 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023), findings.
[Weiying Luo](#), Qiaosheng Chen, Zhiyang Zhang, Zixian Huang, Gong Cheng. [\[paper\]](#)

Task-Aware Resolution Optimization for Visual Large Language Models

[Weiying Luo](#), Zhen Tan, Yifan Li, Xinyu Zhao, Kwonjoon Lee, Behzad Dariush, Tianlong Chen.
(Under Review)

TRAWL: External Knowledge-Enhanced Recommendation with LLM Assistance

Preprint 2024.

[Weiying Luo](#), Chonggang Song, Lingling Yi, Gong Cheng. [\[paper\]](#)
(Under Review)

ACORDAR 2.0: A Test Collection for Ad Hoc Dataset Retrieval with Densely Pooled Datasets and Question-Style Queries

The 47th International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR 2024).

Qiaosheng Chen, [Weiqing Luo](#), Zixian Huang, Tengpeng Lin, Xiaxia Wang, Ahmet Soylu, Basil Ell, Baifan Zhou, Evgeny Kharlamov, Gong Cheng. [\[paper\]](#)

Dense Re-Ranking with Weak Supervision for RDF Dataset Search

*The 22nd International Semantic Web Conference (ISWC 2023 **Best Research Paper Nominee**).*

Qiaosheng Chen, Zixian Huang, Zhiyang Zhang, [Weiqing Luo](#), Tengpeng Lin, Qing Shi, Gong Cheng. [\[paper\]](#)

CKGSE: A Prototype Search Engine for Chinese Knowledge Graphs.

Data Intelligence (DI 2022).

Xiaxia Wang, Tengpeng Lin, [Weiqing Luo](#), Gong Cheng, Yuzhong Qu. [\[paper\]](#)

(Completed during undergraduate studies)

Content-Based Open Knowledge Graph Search: A Preliminary Study with OpenKG.CN

Proceeding of the 2021 China Conference on Knowledge Graph and Semantic Computing (CCKS 2021).

Xiaxia Wang, Tengpeng Lin, [Weiqing Luo](#), Gong Cheng, Yuzhong Qu. [\[paper\]](#)

(Completed during undergraduate studies)

SELECTED AWARDS & ACHIEVEMENTS

Outstanding Graduate Student of Nanjing University (Dec 2023 – Dec 2024)

Academic Scholarship for Master Students: Awarded to graduate students who have achieved outstanding academic results by Nanjing University. (Nov 2022 – Nov 2023)

Elite Program Scholarship: Awarded to students who have achieved a high GPA in the elite program by Nanjing University. (Nov 2019 – Nov 2021)

Undergraduate Outstanding Thesis: Awarded to Bachelor alumni whose thesis is of outstanding quality by Nanjing University. (Jun 2022)

SKILLS

Languages: Python, C/C++, Java, TypeScript, SQL

Technologies: PyTorch, TensorFlow, MySQL, Node.js, React.js, Git, Docker, Kubernetes