Curriculum Vitae Wenyu Li

CONTACT Information South China University of Technology Guangzhou International Campus
Guangzhou, 511442, China
Google Scholar
202130131566@mail.scut.edu.cn
Personal Website

RESEARCH SUMMARY My prior research has focused on information retrieval, text understanding, and applying advanced NLP techniques in interdisciplinary areas. In particular, I have been working on zero-shot text ranking, complex query-based summarization, and social media mental health analysis. As I continue to delve into the realm of LLMs, I would love to continue my research on various LLM-based tasks beyond information understanding and seeking. Additionally, I am keen on creating data-driven solutions that cater to a variety of interdisciplinary fields.

RESEARCH INTERESTS information seeking, information understanding, interdisciplinary NLP solutions

EDUCATION

South China University of Technology, Guangzhou, China

September 2021 - Present

B.Eng. (Expected in 2025 fall), Future Technology Department

- Advisor: Prof. s. eng. Lin Shu
- GPA: 3.67/4
- Main courses: Introduction to Artificial Intelligence (4.00/4.00), Deep Learning and Computer Vision (4.00/4.00), Data Structures (4.00/4.00), Big Data and Data Mining (3.70/4.00), Machine Learning (3.70/4.00), Optimization Methods (4.00/4.00), Discrete Math Organised by Girton College of Cambridge (4.00/4.00), Probability Theory and Mathematical Statistics (4.00/4.00), Complex Analysis (4.00/4.00) (Not list all due to the space)

RESEARCH EXPERIENCE

Tsinghua University, Beijing, China

May 2024 - present

- Visitor, supervisor: Prof. Zhiyuan Liu
- Project: LLMs factual retrieval augmented generation

Westlake University, Hangzhou, China

July 2023 - Present

- Visiting Student, supervisor: Prof. Yue Zhang
- Participating in the National Natural Science Foundation of China (NSFC) project of Prof. Zhang
- Project: Incorporating LLMs for better ranking
 - Incorporating the idea of multi-agent to enhance point-wise ranker
 - Benchmarking LLMs' query based summarization ability based on complex queries
 - Try to prove that natural language feedback can outperform classic label feedback in Human-in-the-Loop (HIL) iteration.
 - Investigating an **iterative text ranking agent** that adapts its comprehension of the user's search intent through learning from labels and **autonomously calibrating its interpretations**.

South China University of Technology, Guangzhou, China

May 2023 - April 2024

- Project Lead, supervisor: Prof. s. eng. Lin Shu
- Project: Design of a Depression Risk Assessment System Based on Psychological Scales and Large Language Models
- Grant: National Level College Students' Innovation and Entrepreneurship Training Program, 2023

South China University of Technology, Guangzhou, China November 2021 - March 2024

- Project Lead, supervisor: Prof. Xiangmin Xu, Principal Researcher Mo Yu
- Project: Depression Tendency Analysis Chatbot Based on WeChat Official Accounts
- Grant: Guangdong Province Science and Technology Innovation Strategic Special Fund Project, 2022

University of Science and Technology of China, Hefei, China October 2019 - November 2020

- Visiting Student, mentor: Dr. Yadong Li
- Project: A Wearable Device Based on Somatic Interaction Technology

Publications (* EQUAL CONTRIBUTION)

1. Zero-shot Explainable Mental Health Analysis on Social Media by Incorporating Mental Scales W. Li, Y. Zhu, X. Lin, M. Li, Z. Jiang, Z. Zeng

Short Paper of International World Wide Web Conference (WWW), 2024

2. Wearable device based on arm somatosensory interaction technology

W. Li

Practical Electronics journal (ISSN: 1006-5059), 2021

- 3. Generating Diverse Criteria On-the-Fly to Improve Pointwise LLM Rankers F. Guo*, W. Li*, H. Zhuang, Y. Luo, Y. Li, Q. Zhu, L. Yan, Y. Zhang, COLM 2024 (Under review)
- 4. AuthorSight-QA: Benchmarking Multi-Scientific-Paper QA in the view of Authors. F. Guo*, W. Li*, Y. Zhang, NeurIPS 2024 (Under going)
- 5. CompQBS: Benchmarking complex query based summarization in scientific texts F. Guo*, **W. Li***, Y. Zhang, 2024 (Pre-print)

PATENT

1. Wearable device based on arm somatosensory interaction technology

W. Li

China patent, CN110413126B

2. Somatosensory camera convenient to install

W. Li

China utility model patent, CN210716640U

3. Depression Risk Assessment Method and System Based on Psychological Scales and AIGC Large Models

W. Li, M. Li, Y. Zhu, X. Lin, J. You, Z. Jiang

China patent, Application Number: 2024103834530 (Under review)

AWARDS

- Scholarships Third-Class South China University of Technology Scholarship, 2022-2023
 - Third-class EXCELLENCE GROUP Enterprise Donated Scholarship, 2022-2023
 - Future Innovation Award, Future Technology Taihu Innovation Award by Wuxi government, 2022
 - Study Abroad Innovation Award, Future Technology Taihu Innovation Award by Wuxi government, 2022
 - First-class Science and Technology Innovation Award, Future Technology Taihu Innovation Award by Wuxi government, 2022
 - Third-class Academic Innovation Award, Future Technology Taihu Innovation Award by Wuxi government,
 - First-class Hong Ping Chang Qing Fund Student Science and Technology Innovation Competition Scholarship, 2022
 - Second-class Hong Ping Chang Qing Fund Student Science and Technology Innovation Competition Scholarship, 2022
 - Third-class Hong Ping Chang Qing Fund Student Science and Technology Innovation Competition Scholarship, 2022
 - Second Prize, 12th MathorCup College Mathematical Modeling Competition (Undergraduate Group), 2022
 - Second Prize, China National Collegiate Mathematics Modeling Competition (Guangdong Provincial Division), 2022
 - First Prize, Asia and Pacific Mathematical Contest in Modeling (Undergraduate Group), 2022
 - Third-Class South China University of Technology Scholarship, 2021-2022
 - Third-class Hua Meng (TCL) Enterprise Donated Scholarship, 2021-2022
 - Second Prize, Future Technology Baidu PaddlePaddle Cup Student Science and Technology Project Competition, 2021

Services

Professional • Reviewer for Conference: IJCAI 2024

SKILLS

- PROGRAMMING Programming Languages: Python, C/C++, MATLAB, VHDL, Java
 - Machine Learning Libraries: Pandas, Matplotlib, PyTorch, TensorFlow, Hugging Face, langchain ...