

Rubin Li

Tel: +86-18902201062

Email: lirubin0108@163.com

Education Background

Sun Yat-Sen University, Guangdong, China

09/2020 – 06/2025

- ◆ Bachelor of Engineering in Telecommunication Engineering GPA: 3.4/4.0
- ◆ Core module: Advanced Mathematics-1, Linear Algebra, Probability and Statistics, Fundamentals of Big Data and Artificial Intelligence, Computer Programming, Data Structures and Algorithms, Signals and Systems.

Publication

Periodic Prompt on Dynamic Heterogeneous Graph for Next Basket Recommendation

Ru-bin Li, Man-Sheng Chen, Chang-Dong Wang*, Sihong Xie, et al.,

Proceedings of the IEEE International Conference on Data Mining (ICDM), 2024. (Accepted)

Undergraduate research program

11/2023 – 06/2024

- ◆ First unified dynamic and heterogeneous information in the recommendation field and introduced a new periodic graph prompt method based on consumer behavior theory. Compared to ten state-of-the-art methods across six different real-world datasets, our approach demonstrates a significant improvement.
- ◆ Responsible for model design and adjustment, data cleaning and preprocessing, algorithm validation through experiments, independent paper writing, and maintaining close communication with co-authors.

Patent Achievement

A Communication Guideline System and Method Based on chatGLM Model (Patent granted)

Undergraduate research program

Student Lead Inventor; Patent Application No.: CN202410235369.4

- ◆ Led data processing efforts, utilizing web scraping for real-time data collection and applying the Retrieval-Augmented Generation (RAG) framework to enhance data retrieval efficiency.

An Integrated Service System for Agricultural Supply Chain Based on 5G Network

Internship program

Student Lead Inventor; Patent Application No.: CN202311290141.7

- ◆ Contributed to the development of a 5G-enabled agricultural **supply chain system**, focusing on integrating and **processing multimodal data** for real-time monitoring and decision-making.

Research & Internship Experience (Data Science related)

Project Leader | Analyze Travel Purpose Through Transportation Origin-Destination Data

02/2024 – Present

- ◆ Led weekly progress meetings with **Guangzhou Jiaoxintou Technology Co., Ltd.**, focusing on data-driven insights.
- ◆ **Self-studied NLP techniques (LDA, TF-IDF)** to analyze transportation origin-destination data, resulting in reports exceeding 50,000 words and a comprehensive documentation for the company.

Project Member | Deep Reinforcement Learning-based Bi-directional Dynamic Bus Scheduling

02/2024 – 07/2024

- ◆ Collected and cleaned bus operation data; applied and optimized **reinforcement learning** methods for bus scheduling; compared performance with other state-of-the-art methods.

Project Member | Fine-tuning Large Language Models to Build Intelligent Customer Service

05/2024 – 07/2024

- ◆ Processed over 100,000 customer service tickets, applying **NLP** methods to extract features and perform secondary classification, writing over 1,000 lines of code.
- ◆ Utilized a large language model API to convert ticket information into usable training data, creating a complete workflow and producing a documentation exceeding 10,000 words.

Informatization Management Department, Tranbiot Tech Co., Ltd.

07/2022 – 08/2023

- ◆ Conducted site visits to three companies to gather informatization needs, applying **communication** knowledge to contribute to the development of a production line's information system, resulting in **one related patent**.

Product Department, Shenzhen Yimi Station Technology Co., Ltd.

07/2021 – 08/2021

- ◆ Processed statistical data and clustered ingredients to create suitable catering options, enhancing consumer choices and expanding the company's product range.

Honor & Skills

- ◆ Successful Participant Award in Mathematical Contest In Modeling/Interdisciplinary Contest In Modeling
- ◆ Third Prize of Guangdong Division in "Datang Cup" National College Student Mobile Communication 5G Technology Competition
- ◆ TOEFL: 103 (Reading: 25; Listening: 28; Speaking: 23; Writing: 27) Test Date: August 21, 2024
- ◆ Highly **self-motivated** and adept at **self-learning**, with a **strong passion** for data science and large language models.
- ◆ Proficient in Python, C, C++, Matlab, Verilog, VHSIC Hardware Description Language (VHDL).