# Muyan Weng

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#### **Education**

### Shanghai Jiao Tong University

2021/09 - 2025/06

B.S. in Computer Science and Technology (IEEE Pilot class)

- GPA: 3.80/4.30
- Relevant Courses: Linear Algebra, Optimization, Data Structure, Machine Learning, Principle and Methods of Program Design, Probability and Statistics, Artificial Intelligence Principles and Applications

### Research Experience

#### APEX Data and Knowledge Management Lab, SJTU

2023/09 - Present

Research Assistant, Advised by Prof. Weinan Zhang and Prof. Yong Yu

Shanghai, China

- Research Topic: "Beyond Positive History: Re-ranking with List-level Hybrid Feedback" and "Efficient and Deployable Knowledge Infusion for Open-World Recommendations via Large Language Models"
- Designed a re-ranking model that efficiently utilizes users' list-wise behavior history to optimize recommendations in the first project. Incorporated both positive and negative feedback to model and align user behavior patterns with current candidates using contrastive learning, while also factoring in the temporal evolution of user interests to enhance model adaptability.
- Worked on item clustering to reduce computational load and enable the system to effectively scale for handling largescale datasets in the second project.

### Taobao and Tmall Group, Alibaba Group Holding Limited

2024/07 - Present

Research Intern, Adivised by Wen Chen

Beijing, China

- Research Topic: "Enhancing the Serendipity of Homepage Recommendation via LLMs"
- Aimed to enhance the serendipity of homepage recommendations on Taobao by leveraging the reasoning capabilities of large language models and external knowledge. Employed various methods to continuously optimize user experience, improve recommendation accuracy, and increase user retention rates.
- Paper will be released in 2025.

**XAI Lab, SJTU** 2023/02 – 2023/08

Research Assistant, Advised by Prof. Quanshi Zhang

Shanghai, China

- Research Topic: "Explaining Neural Networks by Using Robust Interactions"
- Developed a new method to extract noise-robust interactions encoded by a DNN. Our interaction ensured the stability and consistency of explanations.

## **Publications & Preprints**

#### Beyond Positive History: Re-ranking with List-level Hybrid Feedback

<u>Muyan Weng\*</u>, Yunjia Xi\*, Weiwen Liu, Bo Chen, Jianghao Lin, Ruiming Tang, Weinan Zhang, Yong Yu Under Review (WWW'25), [<u>Paper</u>]

#### Efficient and Deployable Knowledge Infusion for Open-World Recommendations via Large Language Models

Yunjia Xi, Weiwen Liu, Jianghao Lin, <u>Muyan Weng</u>, Xiaoling Cai, Hong Zhu, Jieming Zhu, Bo Chen, Ruiming Tang, Yong Yu, Weinan Zhang

Under Review (TORS'24), [Paper]

### **Explaining Neural Networks by Using Robust Interactions**

Jie Ren, <u>Muyan Weng,</u> Lu Chen, Tian Han, Quanshi Zhang

**Under Review** 

#### Skills

English ability TOEFL iBT:102(R29+L25+S21+W26)

Programming Python, C++, LATEX, SQL, Linux

Framework PyTorch, Tensorflow ,NumPy, Flask, MySQL, Git, Anaconda