# Jiamu Zheng (Jamie)

21 years old | Party Member 18260603656 | 2944334243@qq.com

#### Education

## Sep 2020 - Present

#### University of Electronic Science and Technology of China (UESTC)

Software Engineering (Bachelor)

**Major Ranking**: 11% (14 / 121)

Major Course: Including but not limited to courses such as Introduction to Machine Learning, Digital Image Processing (97), Computer Graphics (93), Database (92), Software Engineering (90), etc. In addition, solid foundational knowledge in subjects like C language (92), Calculus II (90) has also been acquired. Specializing in computer vision and graphics, with a broad range of extracurricular interests and research experience in multiple areas within deep learning including NLP, RL, and RS.

# Research experience

#### Jan 2023 - Present

## Wangxuan Institute of Computer Technology, Peking University

As a research intern, I collaborated with a PhD student from the Wangxuan Institute of Computer Technology to explore the application of NeRF in the field of autonomous driving. I was responsible for all code implementation in the project and conducted paper reproduction and idea experimentation.

#### Oct 2022 - Present

### Professor Yang Bo's Laboratory, UESTC.

The research group mainly focuses on the field of recommendation systems. During this experience, I have mainly worked on the following tasks:

- Reproduced a KG-Based RS model without open source code, which helped with the experimental work of a master student in the research group and received acknowledgements from the author at the end of their paper.
- Independently proposed multiple research points, such as attention noise perception and the transfer application of wavelet transform in RS. Currently, the relevant work has been formed into a paper and submitted to CIKM'23 (CCF B) as an independent first author and independent corresponding author.

#### Aug 2022 - Oct 2022

#### NLP Research Group, Nanjing University.

During this experience, I collaborated with a PhD student under the supervision of Professor Xinyu Dai at Nanjing University, mainly conducting research on numerical reasoning about Math Word Problem(MWP). We utilized methods such as relation extraction and dependency parsing to improve some challenging datasets in the MWP field.

# Jul 2022 - Aug 2022

# NLP Summer Camp, Nanjing University.

This project is an exploratory research activity aimed at universities across the country. It was led by PhD students from NLP group at Nanjing University. The topic focused on implementing logical reasoning for simple mathematical problems in finance using sequence labeling approach. I employed the classic model of BERT-BiLSTM-CRF and combined it with my personal design of Independent Program Coding to achieve the highest accuracy in the research group and performance close to the state-of-the-art (SOTA) models. As a result, I was awarded the title of "Best Performance" outstanding member.

## Project experience

#### Dec 2021 - Aug 2022

#### Cloud-Edge-End Factory Collaborative Production Scheduling System Based on DQN and VA Algorithms

This project was a competition project, and I served as the team leader responsible for algorithm design and overall framework planning. I proposed a solution to the scheduling problem and task assignment problem in a complex factory environment using a combination of Deep Q-Network algorithm from reinforcement learning and my independently developed V-Avg algorithm.

# Oct 2021 - Mar 2023

# Internet Public Opinion Analysis Based on Bert Model.

This project was a comprehensive design project in my college, and as the team leader, I designed the overall project framework. I proposed a crawler solution based on bf4 and webdriver, which was able to collect data effectively. To analyze public opinion, I introduced the Bert model, which has achieved outstanding results in NLP sentiment analysis. I also implemented a key individual recognition system using the modeling ideas of recommendation systems. For this, I designed a model framework based on FMLP (2022 WWW) and combined it with multimodal networks such as SEnet to extract video features. The final presentation of the project was rated A+.

## **Honors & Awards**

- Certificate for "Best Performance" Award at NLP Group Summer Camp of Nanjing University in 2022
- Third prize in 2023 China Undergraduate Computer Design Competition Second Prize in 2023 China National College Student "Innovation, Originality and Entrepreneurship" Challenge
- Won multiple provincial and school-level awards at the 2022 C4-Network Technology Challenge, "Challenge Cup" Competition and other competitions.
- Honorary title of Outstanding Communist Youth League Cadre at the university level and Outstanding Practice Individual at the university level at UESTC
- · Annual First Prize Scholarship and Second Prize Scholarship at the university level at UESTC
- English proficiency: CET-4 score of 535 and CET-6 score of 490.