

CURRICULUM VITAE

# Junshan Huang

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## Educational Background

### University of Science and Technology of China (USTC)

Bachelor of Engineering in Artificial Intelligence

Top 5%, GPA: 3.85/4.3

September 2021 - July 2025

### Rutgers University - New Brunswick

PhD in Computer Science (Supervised by Prof. Jingjin Yu)

September 2025 - June 2030

## Research Interests

Embodied AI, Household Robots, especially in the kitchen.

## Publications

### VLA-OS: Structuring and Dissecting Planning Representations and Paradigms in Vision-Language-Action Models

NIPS 2025

Chongkai Gao, Zixuan Liu, Zhenghao Chi, Junshan Huang, Xin Fei, Yiwen Hou, Yuxuan Zhang, Yudi Lin, Zhirui Fang, Lin Shao

### UniFaRN: Unified Transformer for Facial Reaction Generation

ACMMM 2023

C. Liang, J. Wang, H. Zhang, B. Tang, J. Huang, S. Wang, and X. Chen, in MM '23: Proceedings of the 31st ACM International Conference on Multimedia, 2023, pp. 9506-9510.

## Research Experiences

### Benchmarking Vision-Language-Action (VLA) Paradigms

Jan 2025 – June 2025

National University of Singapore (NUS), supervised by Prof. Lin Shao

- Developing hierarchical evaluation metrics and comprehensive benchmarks for VLA models.
- Implementing a unified evaluation framework and help conduct large-scale experiments on LIBERO, COLOSSEUM, FurnitureBench, etc.

### Open-Vocabulary Detection and Relation Recognition Research Intern

Jul 2024 – Dec 2024

Hong Kong University of Science and Technology (HKUST), supervised by Prof. Long Chen

- Built and evaluated scalable open-vocabulary detection and scene understanding pipelines using hyperbolic space.
- Proposed continuous surface modelin to enhance relation understanding powered by genreral knowledge in LLMs.

### LLM Financial Agent System

Sep 2023 – May 2024

University of Science and Technology of China (USTC), supervised by Prof. Yi Zhou

- Built an LLM-powered financial agent system supporting complex information retrieval and reasoning.
- Deployed the system in a brokerage firm's trial environment, demonstrating practical usability.

### Automatic Facial Reaction Generation

Apr 2023 – Jul 2023

University of Science and Technology of China (USTC), supervised by Prof. Xiaoping Chen

- Formalized facial reaction generation via tokenization and multimodal fusion methods.
- Contributed preprocessing and feature extraction code integrated into the project's final demonstration.

## Skills

**Programming:** Python (Advanced), C/C++ (Proficient), Matlab (Intermediate)

**English:** TOEFL 107 (Reading 30, Listening 30, Speaking 22, Writing 25)

## Honors & Awards

AI Talent Program Scholarship, USTC (only 4 Students)

October 2024

Shenzhen Stock Exchange Scholarship

October 2023

First Prize in ACM REACT 2023 Multimodal Challenge

July 2023