

# Runhan Huang

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## Education

**Andrew Yao Class, Tsinghua University**

*Bachelor of Science in Computer Science (GPA: 3.87 / 4.00)*

September 2022 - Now

Beijing

## Experience

**MARS Lab, IIIS & Shanghai Qizhi Institute**

*Research Assistant*

- Advised by Prof. Hang Zhao

June 2024 – Now

Beijing

**Du Lab, Kempner Institute, Harvard University**

*Visiting Researcher*

- Advised by Prof. Yilun Du

March 2025 – September 2025

MA, USA

## Publications

[P1] **Runhan Huang\***, Shaoting Zhu\*, Yilun Du, Hang Zhao. "MoELoco: Mixture of Experts for Multitask Locomotion," *arxiv*, 2025.

[P2] Shaoting Zhu\*, Linzhan Mou\*, Derun Li, Baijun Ye, **Runhan Huang**, Hang Zhao. "VR-Robo: A Real-to-Sim-to-Real Framework for Visual Robot Navigation and Locomotion," *arxiv*, 2025.

[P3] Shaoting Zhu, **Runhan Huang**, Linzhan Mou, Hang Zhao. "Robust Robot Walker: Learning Agile Locomotion over Tiny Traps," *ICRA*, 2025.

## Projects

**Automatic offside detection system** | *Computer Vision Course Project*

- Designed an automatic soccer offside detection pipeline.
- Constructed a high-quality soccer offside dataset
- Developed an automatic soccer offside detection system by training deep learning models and applying computer vision methods

**An LLM application : Situation Puzzle Game** | *Deep Learning Course Project*

- Developed a webpage application : Situation Puzzle Game (also known as "Turtle Soup")
- Built an application webpage using streamlit and LLM APIs.
- Conducted detailed prompt engineering.

**Implicitly Exploit the Modularity in Multimodal Large Language Models** | *Multimodal Machine Learning Course Project*

- Proposed a new gradient update strategy for visual instruction tuning
- Trained a LVLM based on phi-2 model, achieving good performance

## Skills

**Programming:** C, C++, Python, Pytorch, ROS

**Key Course Taken:** C/C++ Programming (A+), Calculus (A), Linear Algebra (A), General Physics (A+), Algorithm, Probability and Statistic, Machine Learning, Deep Learning, Multimodal Machine Learning (A+), Computer Vision (A), Theoretical Computer Science, Reinforcement Learning, Autonomous Driving (A+), Advanced Computer Graphics (A)

## Extracurricular experience

**IIIS Soccer Team**

*Captain*

- Led a soccer team of 30 students and managed the soccer club of IIIS.

Jan 2024 – Now

Beijing