

JIAQI LI 李嘉祺

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EDUCATION

Tsinghua University

Software Engineering, School of Software

- GPA: 3.698 / 4.000, 40%;

Beijing, China

2022.09 – 2026.06

RESEARCH EXPERIENCE

Multi-Robot Social Navigation with Cooperative Occupancy Prediction

2024.06-2024.10

Research intern, Group Leader

U. C. Riverside, USA

Directed by [Prof. Jiachen Li](#). In this project, I introduced a novel multi-robot social navigation system that integrates cooperative perception from autonomous driving into multi-agent reinforcement learning framework. I had the opportunity to lead a small research group. The paper was submitted to ICRA but is currently undergoing peer review.

3D human body reconstruction based on inverse rendering

2023.08-2024.05

Research intern

Beijing, China

This project is co-supervised by Prof. Feng Xu and Wenbin Lin, focusing on the reconstruction of real-time human body movements, mesh and lighting textures from a sparse perspective. We used a small number of camera as input, to estimate the posture of the human and render it into mesh model in real time. The paper is currently under review.

Quality of Experience(QoE) Improvement in Mobile Live Streaming Program

2023.03-2023.07

Research intern

Beijing, China

In this project, I extensively searched and read relevant publications, and attempted to implement a method for evaluating video streaming hotspots through C++, fanally applied to the adaptive bitrate system in our laboratory.

PROJECT EXPERIENCE

Multi-modal AI assistant based on Django and LocalAI

2023.09

Group Leader

Tsinghua University, China

In this project, I led the development of a multi-modal AI assistant that seamlessly integrates language, image, and speech processing capabilities using **LocalAI**. The assistant providing a cohesive user experience through a **Gradio** interface. This endeavor provided me with leadership experience and LLM app developing experience for the first time.

MediPlot, a medical data visualization software based on Qt

2023.09

Individual developer

Tsinghua University, China

Mediplot is a medical data visualization software developed based on Qt and Eigen. This program provides functions for data analysis such as data import, chart drawing, and cluster analysis. I **developed GUI interfaces** and gained an understanding of modern **programming design pattern** and **coding standards**.

Clightbot, a C++ Program Design Class Homework

2022.12

Group Leader

Tsinghua University, China

In this project I implemented a puzzle game similar to the well-known game "Lightbot" through command operations and image file reading and writing. Through this project, I have improved my **C++ programming skills** and the ability to lead a team in **collaborative project development**.

SKILLS & COURSES LEARNED

Courses Learned

- School Courses:** C++ Programming(4.0/4.0), OOP (4.0/4.0), Data Structure(4.0/4.0), Stochastic Process (4.0/4.0), Graph Theory (4.0/4.0), Modern OS(4.0/4.0), Web(4.0/4.0), Machine Learning, Software Engineering
- Online Courses:** Graphics (GAMES101), Intro. to A.I. (UCB CS188), DL&CV(cs231n), D.R.L.(UCB CS285)

Programming Skills

- C++** (Qt, Eigen), **Python** (Pytorch, OpenCV, Gym, Django), **Web** (React, JS/HTML/CSS).
- Others:** LocalAI, LaTeX, Unity, Blender...

Language

- English:** TOEFL(89), CET6(585)