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EDUCATION

Tsinghua University **Beijing, China**
Software Engineering, School of Software 2022.09 – 2026.06
- GPA: 3.74 / 4.00 (Rank: 28 / 78)

RESEARCH EXPERIENCE

Wanderland: Geometrically Grounded Simulation for Open-World Embodied AI **2025.03-2025.11**
Research Intern, NYU Tandon School of Engineering, USA *Advisor: Prof. Chen Feng*
- Worked on Wanderland, a real-to-sim framework and dataset that reconstructs metrically accurate indoor–outdoor urban scenes, trains 3DGS models for integration into Isaac Sim for open-world embodied navigation benchmarking.
- Designed the **data collection pipeline**, and **conducted experiments** analyzing how geometric grounding affects 3D reconstruction quality and the reliability of RL-based embodied navigation benchmarks.
- Manuscript submitted to CVPR 2026.

Multi-Robot Social Navigation with Cooperative Occupancy Prediction **2024.06-2024.10**
Research Intern, University of California, Riverside, USA *Advisor: Prof. Jiachen Li*
- Proposed an uncertainty-aware multi-robot social navigation framework that integrates **cooperative perception** from autonomous driving into a **multi-agent reinforcement learning** setting.
- Implemented cooperative occupancy prediction and trained MARL navigation policies in interaction scenarios.
- Paper submitted to IEEE Robotics and Automation Letters (RA-L).

Feature Aggregation for Free-viewpoint Dynamic Human Video from Sparse Views **2023.08-2024.05**
Research Intern, Tsinghua University, China *Advisor: Prof. Feng Xu*
- Worked on real-time reconstruction of dynamic human bodies and lighting from sparse views via inverse rendering.
- Implemented parts of the multi-view pose estimation and feature aggregation pipeline and helped build a real-time mesh rendering system.

Quality of Experience (QoE) Improvement in Mobile Live Streaming Program **2023.03-2023.07**
Research Intern, Tsinghua University, China
- In this project, I surveyed literature on Quality of Experience (QoE) for video streaming and implemented a C++ method for hotspot evaluation, later integrated into an adaptive bitrate system in our lab.

PROJECT EXPERIENCE

Cultural Compass, an AI-powered Inbound Travel Assistant **2024.12**
Product Manager & Backend Developer *Tsinghua University, China*
Led the **design and development** of a **cross-platform AI application** that helps foreign tourists overcome cultural and language barriers in China, especially when ordering unfamiliar cuisines. I also implemented backend services with an LLM-enhanced database that provides interactive translations, recommendations, and multi-language dietary tags to guide user choices. The project was awarded the **Silver Prize** in 2024 Tsinghua Software Innovation Competition.

Multi-modal AI assistant based on Django and LocalAI **2024.08**
Team 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 provides a cohesive user experience through a **Gradio** interface. This project gave me both leadership experience and hands-on experience in developing LLM-based apps.

MediPlot, a medical data visualization software based on Qt **2023.09**
Individual developer *Tsinghua University, China*
Mediplot is a medical data visualization tool using Qt and Eigen, supporting data import, chart plotting, and clustering analysis. I designed the GUI and applied modern software design patterns and coding standards.

SKILLS

Research: RL, 3DGS, Embodied Navigation & Simulation, Graphics, AI App development, Rapid Prototyping.
Programming: Python, C++, C# (Unity), Web.
Languages: English (TOEFL 103, CET-6 585); Chinese (native);