

Chenyang Wan

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EDUCATION

Zhejiang University

B.Eng. Control Science and Engineering

Expected June 2025

GPA: 3.97/4.0 (90.2/100) Rank: 12/121

SKILLS

Programming: Python, C/C++, MATLAB

Language: Chinese (Native), English (TOEFL: 96)

Tools: L^AT_EX, SOLIDWORKS, FPGA, Arduino

PUBLICATIONS

1. **Chenyang Wan**, Zhuqing Zhang, Yue Wang, Rong Xiong. *Fusing Multiple Maps into Error-Bounded Segmented VIO: Preliminary Study*. International Conference on Guidance, Navigation and Control (ICGNC 2024)

PROJECTS

Embodied Multi-modal Perception and Navigation System | *Python, ROS*

Present

- Involved in constructing a generalized embodied multi-modal navigation system with real-time interactive dialogue and 3D spatial perception capabilities
- Designed a waypoint predictor to assist in issuing navigation commands for the MMLM
- Responsible for the deployment of the model on real robots

UWB-Based Mutual Localization in Multi-Robot Systems | *C/C++, ROS*

Apr. 2024

- Student Research Training Program (SRTP) at ZJU Robotics Lab, supervised by Prof. Yue Wang
- Incorporated ultra-wideband (UWB) ranging measurements into the localization framework
- Implemented a system that estimated the UWB anchors' positions simultaneously along with the robot poses
- Solved problems related to the initialization of the UWB ranging node localizations in the multi-robot system

3D Reconstruction and Visual Localization in Campus Scenes | *Python*

Dec. 2023

- Full mark term project for the course *Introduction to Computer Vision*, which is offered by Dr. Xiaowei Zhou
- Used *hloc* for scene reconstruction (sparse), and compared the effects of different algorithms
- Trained our own dataset to achieve an end-to-end visual localization improvement solution based on *pixloc*
- Introduced featuremetric refinement enables scalability to multiple images and large scenes

HONORS

Zhejiang Provincial Government Scholarship

2023, Zhejiang Provincial Government

Zhejiang University Frist-Class Scholarship

2022/2024, Zhejiang University

EXPERIENCE

OpenRobotLab, Shanghai AI Laboratory | *Research Intern*

Jun. 2024 – Present

- Proposed to build a LLM-based system designed for language-guided visual navigation, with the capability to handle multi-modality inputs, unconstrained language guidance, interaction with an open-world environment
- Advisors: Dr. Jiangmiao Pang

Robotics Lab, Zhejiang Univeristy | *Research Intern*

Apr. 2023 – May. 2024

- Proposed a filter-based framework aimed at enhancing VIO performance by leveraging multiple isolated maps and utilizing triggered VIO reinitialization, which can mitigate the drift intrinsic to long-duration deployment of odometry effectively and avoid the construction of a global map at the same time
- Advisors: Prof. Yue Wang and Prof. Rong Xiong