GENG LI

email: LGG315@163.com

EDUCATION

Shandong University

Bachelor of Electrical Engineering

• Overall GPA: 89.0

Shandong, China 2021-2025(expected)

RESEARCH INTERESTS

Computer Vision 3D Vision

Electrical engineering foundation

RELEVANT COURSES

Operational Research (97) Signal and System(95) Probability Theory (98)

Single-chip Microcomputer (94) Power electronic (95) Electric Circuit (93)

(95)

Data with Python (95) ...

EXPERIENCE

Logistics Handling Robot Institution

Shandong University Aug. 2023 - Mar. 2024 Research Intern

Complex variation, field theory (94)

I designed an intelligent logistics handling robot with functions of color recognition, self-navigation, and material transportation. As the team leader, I was responsible for writing the master code of the handling robot, utilizing STM32 as the main control board and the Raspberry Pi for the visual part to ensure effective interaction between STM32 and Raspberry Pi. Additionally, I wrote the code for the Raspberry Pi, primarily using Python and OpenCV to achieve color recognition, target location recognition, and road recognition.

MARS Lab Nanyang Technology University Mar. 2024- now Research Intern

Our main focus is on point cloud registration and 3D detection in adverse weather conditions. We have conducted a comprehensive survey of previous works on 3D detection and found that detection accuracy significantly decreases in adverse weather conditions such as fog. However, the primary goal of our research is not to propose a new method to improve this situation but to identify the underlying reasons for the reduction in accuracy and to conduct a quantitative analysis of these causes.

PUBLICATIONS

[1] UniRiT: Towards Few-shot Non-rigid Point Cloud Registration

First author

Under reviewing

[2] GERA: Geometric Embedding for Efficient Point Registration Analysis

First author

Submitted to ICRA 2025

[3] LCNet: A Robust and Accurate Non-Rigid 3D Point Set Registration Approach for Image-Guided Liver **Surgery**

Second author

Submitted to ICRA 2025

SKILLS

Programming: C/C++ Python (Pytorch, OpenCV) ROS LATEX MATLAB Linux

English: CET 6:496