Li Zhoujian

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|Personal Homepage Link：https://114514wo.github.io/LI-ZHOUJIAN/|

Education

National University of Singapore 2025.8-Present

- **Master** of Science in Robotics
- Key Course:Robot Vision and Al, Robot Kinematics, Robot Dynamics and Control, Machine Leaming in Robotics (Updating...)

Soochow University 2020.9-2024.09

- **Bachelor** of Science in Intelligent Manufacturing Engineering
- GPA: 3.5/4.0 (Weighted Average Mark: 86/100)
- Key Course:Robotics, Artificial Intelligence, Java Programming, Intelligent Manufacturing Information System, PLC & Electric Control

Academic Projects

Below are the primary research projects. A comprehensive list can be found on my personal website :)

●Accelerating RL-based Sim2Real Transfer for Robotic Locomotion Present

Focuses on utilizing reinforcement learning world models to expedite the transfer of robotic locomotion skills from simulation to real-world applications and enhance performance.

●End-to-End Autonomous Recharging System Present

Research on a Two-Stage End-to-End Autonomous Recharging Network Architecture

●Autonomous Mapping and Navigation of Intelligent Vehicles Sep. 2020 to Sep. 2023

project details:

1. Utilizing convolutional neural networks for pedestrian detection and tracking in videos;
2. Predicting pedestrian trajectories to enable real-time obstacle avoidance for a small car.;
3. Under the YOLOv4 environment, it allows for quick mapping;
4. Autonomous path planning under the ROS (Robot Operating System) framework;

Papers:

●The paper that has been accepted to the top Chinese control conference, CCDC:

Title: "A Reinforcement Learning-Based Algorithm for Rapid Path Replanning of Robot Navigation in Indoor Uncertain Discrete Environments".

●The paper that has been completed :

Title :"TG-RRT*: Enhanced Learning-Based Optimal Path Planning via Transformer-CNN Hybrid Network and Goal-Directed Strategy".

Internship Experience

●Shenzhen Tianchen Defense Communication Technology Corporation

Location: Shenzhen, China Jun.1st.2022 to Aug.31st. 2022

Responsible for assisting in the design of interfaces using the C programming language, and utilizing the common image processing library OpenCV for image training.

●Suzhou Suxiang Robot Intelligent Equipment Corporation

Location: Suzhou, China Jun.1st.2023 to Aug. 31st.2023

Simulation Map Modeling in Ubuntu System and Local Path Planning via Gradient Descent Optimization of the A* Algorithm.

Additional information

Languages: Native chinese, Proficient English

Skills: Proficient in C/C++, Python, PyTorch, Ros, Matlab/Simulink, Origin, Ubuntu system etc.