$\underbrace{ YEKE \ CHEN}_{\text{chenyeke@zju.edu.cn}} \underbrace{ \text{https://github.com/shieldkeke} }$

Education

Zhejiang University Hangzhou, China

B.S.E. in Automation

2020 - Present

overall GPA: 3.94/4.00, 89.8/100
major GPA: 3.96/4.00, 90.5/100

• ranking: 3/58

• Selected Coursework: Lectures on Programming 98, Foundamentals of C Programming 95, Robot Modeling and Control 92, Air-robots 92, Comprehensive Practice of Robot and Intelligent System 97

• Scholarships: two Zhejiang provincial government scholarships; two second-class scholarships

Experience

the State Key Laboratory of Industrial Control and Technology - FAST Lab

Zhejiang University

Research intern advised by Prof. Chao Xu and Prof. Fei Gao

10/2023-Present

the State Key Laboratory of Industrial Control and Technology - Robotics Lab

Zhejiang University

Research intern advised by Prof. Rong Xiong and Prof. Yue Wang

7/2023-10/2023

ZJUNlict(a RoboCup SSL team)

Zhejiang University

 $Team\ member$

6/2022-6/2023

Projects

A Cluttered Environment-Adaptive UAV High-Level Planner

10/2023-Present

• Completed a reinforcement learning-based upper layer planning algorithm for UAVs, which realizes adaptive variable-speed flight of UAVs in complex environments

Foothold Planning for Quadruped Robots

7/2023-Present

• Realized online COM trajectory and foothold optimization for quadruped locomotion

• Proposed an end-to-end trajectory and foothold planning method based on single frame vision and reinforcement learning for quadruped robot

Soccer Robot 6/2022-6/2023

- Developed the parallel multi-vehicle-ball-passing-point calculating module based on OpenAcc
- Refined the zero and non-zero speed ball interception modules
- Regularized the passing strength

Continuous Trajectory Generation for Autonomous Driving

5/2022-5/2023

- Designed and trained a two-stage network, which generates continuous trajectory expressions
- Realized autonomous driving in CARLA

Supermarket Shopping Robot - <u>LINK</u>

12/2021 - 5/2022

• Designed the robot from scratch and implemented functions such as object detection, multi-device communication, object grasping, and line-following

Path Planning and Tracking - LINK

7/2023

• Realized RRT*, A* and JPS path planning methods; realized DWA trajectory tracking method

Inverse Kinematics and Trajectory Planning for a Space Robot - LINK

7/2023

• Completed the inverse kinematics of the space robot and the trajectory planning algorithm of joint space based on polynomial interpolation

Awards

Zhejiang Robot Competition - First Prize

5/2023

China Robot Competition / Robocup China Open (SSL) - Second Prize

11/2022

Zhejiang Robot Competition - Second Prize

8/2022

Zhejiang University Robot Competition - First Prize

5/2022&5/2021

Technical Skills