Shuai Zhou

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Personal Website

Education

South China University of Technology Guangzhou, China
Bachelor of Robotics Engineering Sep. 2022 -Jun. 2026 (expected)
GPA: 3.92/4.00 . Rank: 2/56
Core curriculum: Artificial Intelligence Technology and Application, Machine Vision and Sensing Systems, Robot Theory and Technology, Mechanic, Introduction to Engineering, Human-Computer Interaction, Industrial Robots and Applications, Embedded Systems and Design, Data Structure and Algorithm

University of California, Berkeley Berkeley, United States
Exchange student in EECS Aug. 2023 - Dec. 2023
GPA: 4.00/4.00 .
Core curriculum: Data Structures, Designing information devices and Systems I, Introductory Physics II and Introduction to Solid Mechanics

Research Interests

Multi-agent Systems, Motion Planning

Extracurricular self-study:
CMU: 10301/601 Introduction to Machine Learning
CMU: 16-782 Planning and Decision-making in Robotics
Coursera: Robotics: Computational Motion Planning

Recently read papers:
Enhanced Multi-Objective A* Using Balanced Binary Search Trees
Multi-Objective Path-Based D* Lite
Multi-Objective Safe-Interval Path Planning With Dynamic Obstacles
MS*: A New Exact Algorithm for Multi-agent Simultaneous Multi-goal Sequencing and Path Finding
Multi-Agent Pathfinding: Definitions, Variants, and Benchmarks
Swarm of micro flying robots in the wild

Research Experience

Fuxi Guangzhou, China
course project: A bionic powered underwater robot Sep. 2022 - Dec. 2022

- A 5-person team independently designed the bionic robot (without propeller) to avoid underwater obstacles and find the way to the end point, completed the robot appearance modeling and 3d printing through Solidworks, developed with stm32f4 motherboard, designed the driving structure with frog as the imitation object, and used visual sensors and acoustic sensors. The path is constructed using RRT when the 2-D maze map is known. At the same time, the three-dimensional relative position of the sensor perception obstacles is constructed to complete the obstacle avoidance map. I am responsible for the planning part

Skills

- **OS**: Windows, Linux(Ubuntu)
- **Programming Languages**: Python, C/C++, Java, HTML,MATLAB
- **Version Control**: Git
- **Writing**: LaTeX, Office
- **Languages**: Chinese (native), English (fluent)
- **Test grades**: Gre(321), Duolingo(120)