

Lin Zhou

King's College London, London, UK
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EDUCATION

King's College London Sept. 2022 - Jul. 2023
Master of Engineering with Management London, United Kingdom

Degree: Distinction

- Core Courses (Grades): Machine Learning (85), Nature-Inspired Learning Algorithms (84), Sensor and Actuators (75), Robotic Systems (74), Real-Time System and Control (76)
- Workshop Project: Motion Planning Project (89)
(Utilized PRM, Dijkstra, and A* algorithms for pathfinding and motion generation in environments with obstacles.)
- Machine Learning Project (95)
(Employed Perceptron and Neural Network algorithms to analyze the correlation between heart attack incidents and individual profiles.)

Heilongjiang University Sept. 2018 - Jul. 2022
Bachelor of Civil Engineering (Hydraulics) Harbin, China

- Overall GPA: 89.1/100
- Ranking: 6
- Core Courses (Grades): Advanced Physics (92), Advanced Mathematics (95), Probability and Mathematical Statistics (94), Theoretical Mechanics (90), Hydraulics (91), Engineering Geology & Hydraulic Geology (94)

Heilongjiang University Sept. 2020 - Jul. 2022
Bachelor of Finance Harbin, China

- Overall GPA: 86.5/100

PROJECT EXPERIENCE

Master Thesis May. 2023 - Sept. 2023

Topics: Real-Time Balancing of a Quadrupedal Robot through Optimization of Cartesian Centre-of-Mass Impedances using Reinforcement Learning

Link: <https://zlsy32900.github.io/lin-zhou/project1/project1/>

- Leveraged the PyBullet platform, Python and C++ libraries to simulate the motion of the SOLO12 quadruped robot and applied whole-body and impedance control strategies for precise trajectory tracking and disturbance capability.
- Utilized Deep Reinforcement Learning techniques SAC and TD3 to optimize stiffness and damping parameters, yielding promising results compared to traditional methods.
- Developed a unique reward function by combining the DCM indicator and external force through the normalization technique, which led to significant tracking capability and stability improvement, especially under external interference.

INTERNSHIP EXPERIENCE

Data Analyst Intern

Dec. 2021 - March. 2022

Hellobike Co. Ltd

Shanghai, China

- Employed at the leading bike-sharing and e-bike company in China, responsible for analyzing usage patterns and adjusting prices based on data for core products.
- Independently utilized mathematical modules in SQL to capture customer characteristics and conducted diverse group experiments to test customer preferences.
- Contributed to enhancing price structures and developing product performance, leading to a comprehensive understanding of the company's business logic.

OTHERS

Award: Student Scholarship 2021 (students with excellent GPA)

Volunteer: ICRA 2023

Skills: MATLAB, Python, CAD, MS Offices, SQL

Hobbies: Swimming, Badminton, Frisbee, Hiking