

FU ZE 符泽

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EDUCATION

Katholieke Universiteit Leuven (KU Leuven)

Robotics, PhD student

Leuven, Belgium

2025.02-now

Shanghai Jiao Tong University (SJTU)

Robotics (GPA: 3.84/4.00; Rank: top 3%), Master of Engineering

Shanghai, China

2021.09-2024.06

Xi'an Jiao Tong University (XJTU)

Mechanical Engineering (GPA: 4.06/4.3; Rank: 1/212), Bachelor of Engineering

Xi'an, China

2017.09-2021.07

WORK EXPERIENCE

Baidu (Intelligent Driving Group, IDG)

2024.07-2025.01

Decision-making & Planning Algorithm Engineer

- Proposed a gaming algorithm for [JIYUE](#) based on MCTS to address the interaction challenges.
- Implemented offline algorithms to enhance corner data and improve the performance of the end-to-end (E2E) framework.

Ant Group (Digital Technology - AIOT Department)

2023.06-2023.09

Embedded Software and Hardware Development Intern

- Implemented a lightweight Zero-Knowledge Proof (ZKP) algorithm based on zkSNARK protocol, deployed the ZKP algorithm on embedded devices with ARM architecture.
- Developed Solidity smart contracts and deployed them on Ethereum for on-chain verification, and developed a blockchain interaction tool using Web3.js.

Shanghai Artificial Intelligence Laboratory

2022.12-2023.03

Decision-making & Planning Algorithm Intern

- Investigated joint decision-making of multiple intelligent agents under large-scale complex traffic flow.

ACADEMIC RESEARCH

Institute of Design and Control Engineering for Heavy Equipment SJTU

2021.09-2024.03

- Research areas: decision-making and path planning, legged robot, force sensing motion, kinematics and dynamic analysis
- Key achievements: developed a dynamic simulation environment for the noval lander robot; established an external force sensing method based on joint currents and Kalman filter; proposed dynamic foot trajectory planning algorithms based on APF and finite state machine to enable heavy-load legged robots to pass through complex terrains autonomously and smoothly; proposed a localization algorithm based on force sensing and point cloud registration. Paper Link: <https://arxiv.org/abs/2309.01112>.

SELECTED PUBLICATIONS

[1] Fu, Z., Wen, L., Cai, P., Fu, D., et al. TrafficMCTS: A Closed-Loop Traffic Flow Generation Framework with Group-Based Monte Carlo Tree Search. Transactions on Intelligent Transportation Systems.(2024) (Under review). Video Link: <https://youtu.be/Tr0QWCasO54>.

[2] Li, Y., Fu, Z. Experience-Oriented Imitation Locomotion Learning for Legged Mobile Lander with Awareness of Leg Distortions and Extraterrestrial Environment. Engineering Applications of Artificial Intelligence.(2024) (Under review).

[3] Fu, Z., Xu, H., Li, Y., & Guo, W. Design of a Novel Wheel-Legged Robot with Rim Shape Changeable Wheels. Chinese Journal of Mechanical Engineering (2023).

- For the latest and complete list of publications, please visit: [Publications](#) | [Ze Fu \(fitz0401.github.io\)](#)

HONORS & AWARDS

Baidu XiaoZan (Small and commendable) Award	<i>2024.10</i>
IELTS Overall Band 7.5	<i>2023.09</i>
National Scholarship for Graduate Students	<i>2022.12</i>
“Huawei Cup” Mathematical Modeling Competition 2nd Prize	<i>2022.10</i>
College Student Mechanical Design Innovation Competition 1st Prize	<i>2021.02</i>
Outstanding Undergraduate Student Model in XJTU ten only	<i>2020.09</i>
RoboCup China Robot Competition 1st Prize	<i>2020.08</i>
Baogang Scholarship	<i>2019.12</i>
HIWIN Outstanding Student Scholarship top 0.1%	<i>2018.11</i>