JINXUAN ZHU

Harbin Institute of Technology, Shenzhen City, China 518055 Email: <u>nolanzhuhitsz@gmail.com</u> | Tel: <u>+86 138-2231-6313</u>

EDUCATION BACKGROUND

Harbin Institute of Technology, Shenzhen (HITSZ)

Sep. 2021-Jul. 2025(Expected)

BEng in Automation

Shenzhen, China

• **GPA:** 89.58/100 (10%)

• **Major Coursework:** Electric Circuit (100), System Modeling and Simulation (98), Contest Robot Design and Production (96), Design and Practice of Robotic Systems (95), Fundamentals of Analog Electrics (95), Automation Control Theory (94)

University of Oxford Aug. 2023

Short Academic Program of Lady Margaret Hall, Machine Learning and Artificial Intelligence Project

Oxford, UK

Secured an overall A+ grade. Earned a commendation from Dr. Christopher Adamson, Head of Short Academic Programs.

City University of Hong Kong

Jan. 2025-May. 2025

Exchange Student

Hong Kong, China

• Coursework: Deep Learning, Artificial Intelligence, Robotics and Machine Vision, French.

PUBLICATIONS

Chenrui Tie*, Shengxiang Sun*, **Jinxuan Zhu**, Yiwei Liu, Jingxiang Guo, Yue Hu, Haonan Chen, Junting Chen, Ruihai Wu, Lin Shao, "Manual2Skill: Learning to Read Manuals and Acquire Robotic Skills for Furniture Assembly Using Vision-Language Models" (RSS 2025) [Web] [Arxiv]

Hanyi Zhao*, **Jinxuan Zhu***, Zihao Yan*, Yichen Li, Yuhong Deng, and Xueqian Wang, "Learning Generalizable Language-Conditioned Cloth Manipulation from Long Demonstrations" (IROS 2025 in submission) [Web] [Arxiv]

Qi Liu*, Jingxiang Guo*, Sixu Lin, Shuaikang Ma, **Jinxuan Zhu**, Yanjie Li, "MASQ: Multi-Agent Reinforcement Learning for Single Quadruped Robot Locomotion".[Arxiv]

RESEARCH EXPERIENCE

LinS Lab Dec. 2024 - Present

Research Assistant (Supervisor: Prof. Lin Shao, National University of Singapore)

Singapore

Project: VLM Guided Robot Furniture Assembly

• Developed a pipeline utilizing a Vision-Language Model (VLM) to enhance IKEA furniture assembly tasks by interpreting images from instruction manuals. Respondible for real-world experiment, focusing on pose estimation and motion planning.

Al&Robotics Lab Jul. 2024 – Mar. 2025

Research Assistant (Supervisor: Prof. Xueqian Wang, Tsinghua University SIGS)

Project: Generalizable Language-Conditioned Cloth Manipulation

Shenzhen, China

• Developed a method leveraging Large Language Models (LLM) to decompose benchmark and discover basic skills, and subsequently recompose them to multi-step unseen tasks. Responsible for paper writing, simulation and real-world experiments.

Reinforcement Learning Group Lab

Nov. 2023 - Oct. 2024

Research Assistant (Supervisor: Prof. Yanjie Li, HITSZ)

Shenzhen, China

Project: Multi-Agent Reinforcement Learning for Single Quadruped Robot Locomotion

• Applied multi-agent reinforcement learning for quadruped robot locomotion, achieving faster training convergence and enhancing robustness in real world experiments. Responsible for real-world experiments in Unitree GO2.

INTERNSHIP

Dobot RoboticsJul. 2024–Nov.2024

Robot Algorithm Development Engineer (R&D Division - Core Technology Research Department)

Shenzhen, China

• Engaged in the development of the Xtrainer, a dual-arm collaborative robot similar to ALOHA. Responsible for developing and optimising imitation learning algorithms and enhancing generalization for real-world application.

AWARDS

- Academic Awards: 2023-2024 Second Prize Scholarship for Undergraduate Student (15%), 2021-2022 Outstanding Student, Third Prize Scholarship for Undergraduate Student (25%)
- Competition Awards: Second Prize of 2024 National College Students' Robotics Technology Innovation Camp and Competition, Honorable Mention of 2024 Mathematical Contest In Modeling (MCM), Second Prize of 2023 iCAN Innovation Contest, Third Prize of 2023 Smart Car Race

MISCELLANEOUS

- Professional Skills: Python, C, MATLAB, Linux, ROS, Arduino, STM32, Solidworks, AutoCAD, PSpice
- Language: Chinese (native), English (IELTS 7.5 (6.5)), French (amateur)
- Service: Reviewer for ICRA, IROS (2025)