

# YIXIAO FENG

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## EDUCATION

- ◇ **Hong Kong University of Science and Technology (Guangzhou)** Sep. 2025 - Present  
Doctor of Philosophy in Robotics and Autonomous Systems | supervised by Prof. Renjing XU
- ◇ **University of New South Wales** Feb. 2023 - Jan. 2025  
Master of Engineering Science in Robotics (with Excellence) | supervised by Dr. Jose Guivant
- ◇ **Beijing University of Chemical Technology** Sep. 2018 - Jun. 2022  
Bachelor of Engineering in Mechanical Design, Manufacturing and Its Automation

## PUBLICATIONS

C=CONFERENCE, J=JOURNAL, S=IN SUBMISSION

- [C.1] Meijun Guo, Yongliang Shi, Caiyun Liu, **Yixiao Feng**, Ming Ma, Tinghai Yan, Weining Lu<sup>†</sup>, Bin Liang<sup>†</sup>. *Robust and High-Fidelity 3D Gaussian Splatting: Fusing Pose Priors and Geometry Constraints for Texture-Deficient Outdoor Scenes*. IEEE/RSJ International Conference on Intelligent Robots and Systems (**IROS**), 2025.
- [C.2] Weining Lu, Deer Bin, Lian Ma, Ming Ma, Zhihao Ma, Xiangyang Chen, Longfei Wang, **Yixiao Feng**, Zhouxian Jiang, Yongliang Shi<sup>†</sup>, Bin Liang<sup>†</sup>. *Semi-distributed Cross-modal Air-Ground Relative Localization*. IEEE/RSJ International Conference on Intelligent Robots and Systems (**IROS**), 2025.
- [C.3] **Yixiao Feng**<sup>\*</sup>, Zhou Jiang<sup>\*</sup>, Yongliang Shi<sup>†</sup>, Yunlong Feng, Xiangyu Chen, Hao Zhao, and Guyue Zhou. *Block-Map-Based Localization in Large-Scale Environment*. IEEE International Conference on Robotics and Automation (**ICRA**), 2024.
- [S.1] Yunheng Wang<sup>\*</sup>, Yuetong Fang<sup>\*</sup>, Taowen Wang<sup>\*</sup>, **Yixiao Feng**<sup>\*</sup>, Yawen Tan, Shuning Zhang, Peiran Liu, Yiding Ji, Renjing Xu<sup>†</sup>. *DreamNav: A Trajectory-Based Imaginative Framework for Zero-Shot Vision-and-Language Navigation*. IEEE International Conference on Robotics and Automation (**ICRA**), 2026.

## WORK EXPERIENCES

- ◇ **Hong Kong University of Science and Technology (Guangzhou)** Jun. 2025 - Sep. 2025  
Research Assistant | supervised by Prof. Renjing XU  
**Job Duties:** Humanoid Whole-body Control for Highly-dynamic Motions
- ◇ **Beijing National Research Center for Information Science and Technology** Dec. 2024 - May 2025  
Research Intern | supervised by Dr. Yongliang SHI and Dr. Weining LU  
**Job Duties:** Illumination-robust Multi-modal Odometry via Thermal Fusion
- ◇ **Institute for AI Industry Research, Tsinghua University** Oct. 2021 - Dec. 2022  
Research Intern | supervised by Dr. Yongliang SHI and Prof. Guyue ZHOU  
**Job Duties:** Multi-modal Localization and Scene Reconstruction for Mobile Robots in Large-scale Environments

## SKILLS SUMMARY

- ◇ **Programming Languages:** C/C++, Python, Matlab
- ◇ **Software Technology:** ROS, Pytorch, Isaac Sim, Issac Gym, GTSAM, OpenCV
- ◇ **Hardware Technology:** SolidWorks, CAD, Onshape
- ◇ **Language Proficiency:** Mandarin (Native), English (TOEFL 23R/22L/23S/26W)

## HONORS AND AWARDS

- ◇ **Second Prize** in Beijing & **Third Prize** at the National Level of the 7th China International College Students' "Internet+" Innovation and Entrepreneurship Competition
- ◇ **Second Prize** of 2021 RoboCup China Open & RCAP Tianjin Invitational Tournament @HOME Open Platform
- ◇ **Third Prize** of 2020 Asia and Pacific Mathematical Contest in Modeling
- ◇ **First Prize** of Business Class & **Third Prize** of Provincial and Ministerial Level of the 6th China International College Students' "Internet+" Innovation and Entrepreneurship Competition Red Dream Journey for Youth
- ◇ Outstanding Social Work Award "Science and Technology Star" Scholarship in 2019
- ◇ **Second Prize** of Robot Combat and Robot Sprint in "Softbank Robot Cup" 2019 China Robot Skills Competition