

EDUCATION

Tongji University

B.Eng. in Computer Science, College of Electronic & Information Engineering.

– **Gap Year for Research:** Sept. 2021 - Sept. 2022

Shanghai, China

Sept. 2019 - July. 2024

PUBLICATION

*: equivalent contribution, #: corresponding author.

- **3D-Aware Object Goal Navigation via Simultaneous Exploration and Identification**

Jiazhao Zhang*, **Liu Dai***, Fanpeng Meng, Qingnan Fan, Xuelin Chen, Kai Xu, He Wang#

Submitted to *IEEE/CVF Computer Vision and Pattern Recognition Conference (CVPR) 2023*

- **Discovering Novel Categories in SAR Images in Open Set Conditions**

Liu Dai, Weiwei Guo#, Zenghui Zhang, Wenxian Yu

Published at *IEEE/GRSS International Geoscience and Remote Sensing Symposium (IGARSS) 2022*

EXPERIENCE

RESEARCH EXPERIENCE

Peking University

Undergraduate Research Intern, Center on Frontiers of Computing Studies

Advisor: **Prof. He Wang**

Beijing, China

Mar. 2022 - Present

Proj. : Active 3D Scene Understanding & Navigation

- We built a 3D-aware intelligent agent for Object Goal Navigation task, empowered by two simultaneous sub-policies. I conducted part of method design, coding, writing & plotting.
- It was my first time to step into 3D Vision & Embodied AI, and I found it really exciting and promising to build active agents for the real- and open-world.

Proj. : Mobile Manipulation

- On-Going Project.

Tongji-MIT City Science Lab

Undergraduate Research Intern

Advisor: **Prof. Weiwei Guo**

Shanghai, China

Sept. 2021 - Mar. 2022

Proj. : Remote Sensing Image Interpretation with Deep Learning in Open & Challenging World

- To the best of our knowledge, we were the first to introduce Novel Category Discovery(NCD) into the remote sensing community. We started from an application-driven problem: *When encountered with new and unlabelled SAR data, what can we do to make best use of that much data we have labelled?*
- The project itself introduced me into Deep Learning & Computer Vision and piqued my interest in the setting of open-world. I undertook the most of coding, writing & plotting.

TEACHING EXPERIENCE

Teaching Assistant for *Opensource Hardware and Programming* (55010501)

Working with Prof. Xiaohua Sun

- Delivering courses on Python & Arduino

Tongji University

2021 Fall

HONORS

- **SenseTime Scholarship** 2022
 - Nationwide Top 30 Undergrads in AI Research.
- **Tongji Academic Star** 2022
 - Highest Honor for Undergrads in Tongji University.
 - Top 1 among All Candidates.
- **Outstanding Student Scholarship** of Tongji University 2020, 2021

AWARDS

- **National First Prize** in *Challenge Cup* Competition: Research Track 2021
 - Most Influential Research Competition among University Students in China.
 - Best Record in College History.
- **Gold Award of Shanghai** in *Internet+* Competition 2022
- **Gold Award of Shanghai** in *Challenge Cup* Competition: Entrepreneurship Track 2022
- **Silver Award of Shanghai** in National College Student “Innovation, Creativity&Entrepreneurship” Challenge 2022
- **Second Prize of Shanghai & Univ. Champion** in *FLTRP Cup* National English Public Speaking Contest 2020

SKILLS

- **Programming:** C/C++, Python, Arduino;
- **Tools:** Pytorch, OpenCV, Open3D, Habitat Simulator;
- **Other Skills:** Public Speaking, Presentation;

LANGUAGE

- **English:** Fluent
- **Chinese:** Native
- **French:** Basic