

## EDUCATION

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### 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

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\*: 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

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### RESEARCH EXPERIENCE

#### Peking University

Undergraduate Research Intern, Center on Frontiers of Computing Studies

Advisor: **Prof. He Wang**

Topic: Active 3D Scene Understanding & Navigation

- We built 3D-aware intelligent agent for Object Goal Navigation Task.
- I conducted part of method design, coding, writing & plotting. It was my first time to step into 3D Vision, and I found it really exciting & promising to build embodied AI for real- and open-world, for which 3D-vision-related techniques are almost indispensable.

#### Tongji-MIT City Science Lab

Undergraduate Research Intern

Advisor: **Prof. Weiwei Guo**

Topic: 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 a 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

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- **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

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- **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 & College Champion** in *FLTRP Cup* National English Public Speaking Contest; 2020

## SKILLS

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

## LANGUAGE

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