# Jiancheng Pan

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#### **EDUCATION**

- M.E. College of Computer Science and Technology, Zhejiang University of Technology, 2022-2025 Institute of Computer Vision, Supervised by Prof. Cong Bai
- B.E. College of Computer Information Engineering, Jiangxi Normal University, 2018-2022 MoTong-AI Studio, Supervised by Prof. Aiwen Jiang

## **RESEARCH EXPERIENCES**

- 2025– INSAIT, Sofia University "St. Kliment Ohridski"
  Visiting Researcher, Supervised by Prof. Luc Van Gool and Dr. Danda Paudel
- 2023-2025 AI4Earth Laboratory, Department of Earth System Science, Tsinghua University Visiting Research Student, Supervised by Prof. Xiaomeng Huang
- 2024 Platform Facilities Research Department, Shanghai AI Laboratory Intern, Supervised by Dr. Lei Cui

## **RESEARCH AREAS**

My research interests include Multimodal Learning, Data-centric AI, Foundation Model, Multi-modal LLMs, and their application on Earth Observation [GeoAI]. I am also dedicated to tackling challenges in Earth sciences through machine learning, with an emphasis on advancing sustainable development [ML4Sustain].

#### **SELECTED PUBLICATIONS**

- \* indicates equal contribution, † indicates corresponding author
- Jiaohao Li, **Jiancheng Pan**, Yuze Sun, Xiaomeng Huang<sup>†</sup>. Semantic-Aware Ship Detection with Vision-Language Integration. *The International Geoscience and Remote Sensing Symposium, (IGARSS).*
- Yanxing Liu **Jiancheng Pan**, Bingchen Zhang<sup>†</sup>. Control Copy-Paste: Controllable Diffusion-Based Augmentation Method for Remote Sensing Few-Shot Object Detection. *The International Geoscience and Remote Sensing Symposium, (IGARSS)*.
- Jiancheng Pan, Yanxing Liu, Xiao He, Long Peng, Jiahao Li, Yuze Sun, Xiaomeng Huang<sup>†</sup>. Enhance Then Search: An Augmentation-Search Strategy with Foundation Models for Cross-Domain Few-Shot Object Detection. *IEEE/CVF Conference on Computer Vision and Pattern Workshops, (CVPRW)*.
- Jiancheng Pan, Yanxing Liu\*, Yuqian Fu<sup>†</sup>, Muyuan Ma, Jiaohao Li, Danda Pani Paudel, Luc Van Gool, Xiaomeng Huang<sup>†</sup>. Locate Anything on Earth: Advancing Open-Vocabulary Object Detection for Remote Sensing Community. *AAAI Conference on Artificial Intelligence, (AAAI)*, (AGU24, Oral)
- Qing Ma, **Jiancheng Pan**, Cong Bai<sup>†</sup>. Direction-Oriented Visual-semantic Embedding Model for Remote Sensing Image-text Retrieval. *IEEE Transactions on Geoscience and Remote Sensing*, (IF=7.5).

- Jiancheng Pan, Qing Ma, Cong Bai<sup>†</sup>. A Prior Instruction Representation Framework for Remote Sensing Image-text Retrieval. *ACM International Conference on Multimedia*, (ACMMM, Oral).
- Jiancheng Pan, Qing Ma<sup>†</sup>, Cong Bai. Reducing Semantic Confusion: Scene-aware Aggregation Network for Remote Sensing Cross-modal Retrieval. *ACM International Conference on Multimedia Retrieval*, (ICMR, Oral).

# **HONORS AND AWARDS**

2025	Graduate Academic Star of ZJUT (Top 10 Students)
2025	Outstanding Graduate (Zhejiang, China)
2025	INSAIT Graduate Research Fellowship (Sofia, Bulgaria)
2025	Runner-up in the NTIRE 2025 CD-FSOD Challenge (CVPRW 2025)
2024	National Scholarship (Top 1.05%)
2023	National Scholarship (Top 0.2%)
2023	ICMR Travel Award (Thessaloniki, Greece)
2023	Second Prize for China Postgraduate Mathematical Contest in Modelling (Top 13.36%)