

Jiang Yiyi

Gender: Female

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EDUCATION

Dalian Maritime University (211)

B.Eng. in Marine Engineering college

GPA: 4.0/5.0 (Ranked 1st in class of 85 students)

National scholarship; Outstanding graduates

Dalian, China

Sep. 2017 – June 2021

Zhejiang University

MPhil. In Mechanical Engineering, Ocean College

GPA: 83/100

IELTS: 6

Hangzhou, China

Sep. 2021 – Mar. 2024 (Excepted)

RESEARCH PROJECT

Zhejiang University

Research on Coral Detection Technology Based on Machine Vision

2023.01-2023.08

- Project Description: The purpose of the project is to research a coral information processing technology based on image processing and neural networks. It is used to process coral images or videos obtained in various ways, identify corals, and obtain information such as coral species, quantity, size, and depth.
- Skills and Tools: Deep learning-based object detection method, binocular stereo vision, tracking and counting algorithm.

Design and Manufacturing of AUH (Autonomous Underwater Helicopter)

2021.09-2022.12

- Project Description: The objective of the project is to design and manufacture an AUH specifically for coral detection, aimed at mid-scale coral exploration. Based on the requirements for coral detection, the AUH will be designed to carry the coral detection technology developed to detect corals, enabling the detection of corals.

SCIENTIFIC RESEARCH ACHIEVEMENTS

- Yiyi Jiang**, Mengjie Qu, Ying Chen. Coral Detection, Ranging, and Assessment (CDRA) algorithm-based automatic estimation of coral reef coverage. Marine Environmental Research, 2023, <https://doi.org/10.1016/j.marenvres.2023.106157>.
- In application: Ying Chen, Haoda Li, Xinyu An, Zhikun Wang, **Yiyi Jiang**, and Haocai Huang. The instruction manual for the Dual-Drive Autonomous Underwater Helicopter, a patent currently under review.
- Jiang, Y.**, & Chen, Y. (2023). "Mid-Scale Coral Detection Platform." presented at the National Conference on Marine Technology (China). Yiyi Jiang delivered the on-site presentation.

RESEARCH FOCUS

Deep learning
Image processing
Computer vision
Underwater robotics

PROFESSIONAL SKILLS

Mastery of Windows and Linux systems.
Proficiency in commonly used office software and language development tools, such as Office and PyCharm.
Proficiency in the Python programming language.

ABOUT ME

My motivation to pursue a doctoral degree is to further advance my academic knowledge and abilities. My studies in mainland have provided me with a solid foundation in learning, and I now seek to enrich my experience by studying in Hong Kong, where I can benefit from different academic environments and learning methods. I believe that exposure to various modes of thinking can enhance my learning and personal growth.

I am open to exploring diverse research areas, even those that are unrelated to my previous studies. I am motivated by the challenge of acquiring new knowledge and skills, and I hope that my doctoral research will enhance my ability to tackle complex problems and think critically. More importantly, I aim to develop new approaches to problem-solving and cultivate a flexible mindset that can adapt to different academic and professional contexts.