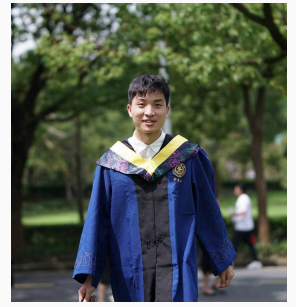


# Haobo LI

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## Research Interests

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- Multimodal LLM, alignment of multi-modalities: climate data, satellite images, text, etc.
- AI for science: climate modeling
- Visualization of data

## Education Experience

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### Computer Science and Engineering

#### The Hong Kong University of Science and Technology (2022 - Now)

PhD

RedBird Scholarship, CGA: 3.87

#### Shanghai Jiao Tong University (2017 - 2020)

Master

National Scholarship, CGA: 3.74

#### South China University of Technology (2013-2017)

Bachelor

National Scholarship, National Encouragement Scholarship, CGA: 3.76

## Working Experience

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#### Intel Corporation

2019 - 2021

Intern & Full-time employee

- Responsible for ensuring firmware software coding quality, using Python and OpenCV.
- First prize of the Intel Hackathon, 2020
- Intel Excellent CG, 2020

#### Research Assistant

2021 - 2022

The Chinese University of Hong Kong

- Research on AI application on medical instruments and robots.

#### Research Assistant

2021 - 2022

The Hong Kong University of Science and Technology

- Research on AI for climate.

## Project Experience

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#### Maritime RobotX Challenge

2018

Organized by the U.S. Department of Defense

- Responsible for UAV visual perception and positioning, using Python and OpenCV to complete target detection, camera calibration, and camera and lidar coordinate fusion.

#### Model test of Lingshui semi-submersible platform

2018

Shanghai Jiao Tong University

- Based on the LSTM model, a very accurate online motion prediction was realized for the platform, and an EI paper was published.

#### Digital Twin of the Greater Bay Area

2018

The Hong Kong University of Science and Technology

- The design and data management of the digital twin to support the simulating and forecasting of physics accurately and efficiently.

## Research Experience

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**Exploring Spatial Hybrid User Interface for Visual Sensemaking**

IEEE Transactions on Visualization and Computer Graphics 2025  
Wai Tong, **Haobo Li**, Meng Xia, Wong Kam-Kwai, Ting-Chuen Pong, Huamin Qu, Yalong Yang

**Assessing the Impact of Cumulus Convection and Turbulence Parameterizations on Typhoon Precipitation Forecast**

Geophysical Research Letters 2024  
Yueya Wang, **Haobo Li**, Xiaoming Shi, and Jimmy Fung

**CLLMate: A Multimodal Benchmark for Weather and Climate Events Forecasting**

arXiv preprint arXiv:2409.19058 2024  
**Haobo Li**, Zhaowei Wang, Yueya Wang, Alexis Kai Hon Lau, Huamin Qu

**Save It for the "Hot" Day: An LLM-Empowered Visual Analytics System for Heat Risk Management**

arXiv preprint arXiv:2406.03317 2024  
**Haobo Li**, Wong Kam-Kwai, Yan Luo, Juntong Chen, Chengzhong Liu, Yaxuan Zhang, Alexis Kai Hon Lau, Huamin Qu, Dongyu Liu

**Landslide visualization situated on tangible terrain models**

IEEE VIS Poster 2023  
**Haobo Li**, Kentaro Takahira, Kam Kwai Wong, and Leni Yang, Wai Tong, Huamin Qu

**On-online prediction of floating offshore platform motions based on LSTM network**

Journal of Ship Mechanics 2021  
**Haobo Li**, Longfei Xiao, Handi Wei, Mingyue Liu

**Experimental Study for the Effect of Appendages on Vortex-Induced Motions of Tension Leg Platform**

International Conference on Ocean, Offshore & Arctic Engineering 2018  
Chenling Tian, Mingyue Liu, Shisheng Wang, Xinru Wang, **Haobo Li**

**Characteristics of vertical exchange process in the Pearl River estuary**

Aquatic Ecosystem Health & Management 2016  
Bo Hong, Wenping Gong, Shiqiu Peng, and Qiang Xie, Dongxiao Wang, **Haobo Li**, Hongzhou Xu

## Teaching Experience

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COMP1029P (L1) - Python Programming Bridging Course	Spring, 2023
The Hong Kong University of Science and Technology	
COMP2011 - Programming with C++	Fall, 2023
The Hong Kong University of Science and Technology	
COMP1021 - Introduction to Computer Science	Fall, 2024
The Hong Kong University of Science and Technology	