Haozheng Ma

📞 +86 13371603806   ✉ mahz@cug.edu.cn   📍 Wuhan   🔗 haozhengma.github.io

Personal Profile

I am a master's student from the School of Computer Science, China University of Geosciences, Wuhan. I am very passionate about GeoAI and AI for Good through multimodal Geospatial foundation models and spatiotemporal data analysis. I am advised by Prof, Lizhe Wang ⬀ (IEEE Fellow & Academia Europaea).

Education

China University of Geosciences, Wuhan   **Wuhan, P.R. China**
- Master of Engineering, Computer Science, GPA: 91.4/100   9/2022-present

Beijing Jiaotong University   **Beijing, P.R. China**
- Bachelor of Engineering, Electrical Engineering, GPA: 3.78/4.0   9/2018-6/2022
- Bachelor of Economics (Double Bachelor Degree), Finance

Publications

Refined Water-Body Types Mapping Using a Water-Scene Enhancement Deep Models by Fusing Optical and SAR Images (**Accepted**, IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, IF=4.7, JCR-Q1) ⬀   Sept. 2024

Haozheng Ma, Xiaohong Yang, Runyu Fan, Wei Han, Kang He, and Lizhe Wang*

Prolonged Water-Body Types Dataset of Urban Agglomeration in Central China from 1990 to 2021 (Revised, Scientific Data, IF=5.8, JCR-Q1)   Nov. 2024

Haozheng Ma, Lizhe Wang*, Xiaohong Yang, Runyu Fan, and Kang He

Remote sensing image interpretation of geological lithology via a sensitive feature self-aggregation deep fusion network (Under review, International Journal of Applied Earth Observation and Geoinformation, IF=7.6, JCR-Q1)   Nov. 2024

Kang He, Jie Dong, *Haozheng Ma*, Yujie Cai, Ruyi Feng, Yusen Dong, and Lizhe Wang*

Off-Road Trafficability Assessment with Remote Sensing Images and Incomplete Geographical and Geological Data via a Cross-Modal Channel Feature Fusion Network (Major Revision, IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, IF=7.5, JCR-Q1)   Nov. 2024

Kang He, Yusen Dong, Zhijun Zhang, *Haozheng Ma*, Runyu Fan, and Lizhe Wang*

Socioeconomic disparities strongly affect the inequalities in human exposure to open space among global megacities (Under review, npj Urban Sustainability, IF=9.1)   Jul. 2024

Runyu Fan, Lizhe Wang*, Haoyu Wang, Wenyue Li, Zijian Xu, Zhaoying Zhou, *Haozheng Ma*, and Ruyi Feng

Technologies

Geospatial data: Remote Sensing Image Processing, Spatial-Temporal Data Analysis, GEE, ArcGIS, ENVI

Artificial Intelligence: Foundation Model, Multimodal data, Deep Learning, Machine Learning, Computer Vision, Natural Language Processing, Full / Semi / Weak / Self-supervised learning

Programming Language: Python(PyTorch for AI), Java, JavaScript, HTML, MATLAB

Research/Project Experience

China University of Geosciences, Wuhan
Wuhan, P.R. China
Oct. 2022 to Dec. 2024

- "Big data of geological environment supports the achievement of sustainable development goals" (CBAS2023ORP03). Responsible for research on long-term time series mapping of multiple types of water bodies.
- "Intelligent interpretation of geological environment remote sensing big data" (Hubei Provincial Natural Science Foundation Key Project). Responsible for research on time series water body mapping.

Beijing Jiaotong University
Beijing, P.R. China
Sept. 2020 to Jun. 2021

- Indoor Temperature and Humidity Control Device Based on Fuzzy Control. (Utility model patent & Second Prize at The Challenge Cup, rank first)
- Online internship platform(Mentor, Professor Zhensheng Wu, Beijing Jiaotong University Excellent Graduation Thesis)

Talks

The 5th Wetland Remote Sensing Conference: Research on multimodal remmote sensing for the classification of multiple types of water body under cloudy weather.
July. 2023

Graduate Salon of Journal of Remote Sensing: Prolonged Water-Body Types Dataset of Urban Agglomeration in Central China(1990-2021)
Oct. 2024

Honors and Awards

China University of Geosciences, Wuhan

- 2022-2024 Three times First class Academic Scholarship from CUG.
- 2022 Third Prize at the Science and Technology Paper Report Conference from CUG.

Beijing Jiaotong University

- 2022 Beijing Jiaotong University Excellent Graduation Thesis(top 5%).
- 2022 Innovation and Entrepreneurship Star from BJTU(10 out of the BJTU).
- 2021 Merit Student of Beijing Jiaotong University(top 5%).
- 2018-2021 Three times Academic Scholarship from BJTU(top 10%).

Internship

Beijing Shenguang Technology Co., Ltd(Shenzhen R&D Center)
Shenzhen, P.R. China
Jun. 2022 to Aug. 2022

- Hardware Engineer, Intern, Mentor Mr Jiawei Guo(CTO)

Beijing Shenguang Technology Co., Ltd
Beijing, P.R. China
Mar. 2022 to Jun. 2022

- Business Department, Intern, Mentor Ms. Sisi Yu(Business VP)

Chipone Technology (Beijing) Co., Ltd
Beijing, P.R. China
Jul. 2019 to Aug. 2019

- Software Engineer, Intern, Mentor Dr. Juncheng Geng(Vice President)

Language

TOEFL: 96 in total, Reading-27, Listening-25, Speaking-22, and Writing-22
Oct. 2024

GRE: 317 in total, Quantitative-167, Verbal-150, and Analytical writing-3.5
Oct. 2024