Yingcong Wang

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EDUCATION

Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences — Changchun, China
Ph.D. student in Cartography and Geographic Information Systems, Advisor: Prof. Dehua Mao — Sep. 2024 – Present

Capital Normal University — Beijing, China
M.S. student in Geographic Information System, Advisor: Prof. Zhaoning Gong — Sep. 2021 – June. 2024

Ludong University — Yantai, China
B.S. student in Geographic Information Science — Sep. 2017 – June. 2021

RESEARCH EXPERIENCES

Landscape Pattern and Environmental Dynamics of Coastal Wetlands

Ph.D. Research, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences

Project 1: Impacts of Coastal Wetland Landscape on Soil Organic Carbon (Mar. 2025 – Present)

- Investigating the evolution patterns of coastal wetland landscapes by analyzing remote sensing big data
- Developing a machine learning-based model to estimate soil organic carbon stocks in coastal wetlands.
- Quantify the impact of landscape pattern changes on soil organic carbon sequestration.

Project 2: Impacts of Coastal Aquaculture on Water Quality (Sep. 2024 – Sep. 2025)

- Developed a dynamic estimation model to quantify drainage variations from coastal aquaculture ponds across China using multi-source satellite imagery.
- Analyzed the correlation between aquaculture drainage dynamics and key offshore water quality parameters.

Spatiotemporal Dynamics of Submerged Aquatic Vegetation (Sep. 2021 – June. 2024)

Master's Thesis, Capital Normal University

- Mapped long-term spatiotemporal succession of submerged aquatic vegetation using time-series remote sensing data
- Evaluated water quality variations through the Forel-Ule Index and related optical metrics
- Examined the coupling relationships between vegetation growth, water level fluctuations, and water quality factors.

PUBLICATIONS

- **Yingcong Wang**, Duanrui Wang, Xinying Shi, Zongming Wang, Kaishan Song, Dehua Mao*,2025. Impacts of coastal aquaculture pond distribution and drainage variations on offshore water quality in China. *International Journal of Applied Earth Observation and Geoinformation*, 143, 104858.
- **Yingcong Wang**, Zhaoning Gong*, Han Zhou,2023. Long-term monitoring and phenological analysis of submerged aquatic vegetation in a shallow lake using time-series imagery. *Ecological Indicators*, 154, 110646.
- Jiameng Zhu, Zhaoning Gong*, **Yingcong Wang**, 2025. Rapid response of aquatic ecosystems and environment in shallow macrophytic lakes to large-scale cofferdam removal. *Ecological Indicators*, 178, 113884.

CONFERENCES

The 6th China Wetland Remote Sensing Conference

Oral Presentation: Impact of Drainage and Storage Water from Coastal Aquaculture Ponds on Nearshore Water Quality in China ***Outstanding Presentation Award***

2024 Remote Sensing Science Graduate Student Salon

Oral Presentation: Long-term Monitoring and Phenological Characteristics Analysis of Submerged Aquatic Vegetation in Baiyangdian Lake ***First Prize***

ADDITIONAL INFORMATION

Technical skills: Google Earth Engine, R, Python, ArcGIS, ENVI, Office
Languages: Chinese (native), English (conversational)