

YINAN FENG

PhD Candidate in Geography | Remote Sensing & GeoAI

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Geospatial researcher developing open building datasets and interactive tools with aerial imagery, elevation, machine learning, and large-scale spatial processing.

SELECTED PROJECTS

US Building Footprint (USBF) | Data & research

Developed selective refinement of GlobalBuildingAtlas footprints using aerial imagery and elevation. Published a six-state update with 25.1 million buildings, retaining source heights, original geometry, identifiers, and edit provenance.

[Dataset](#) [Reproducible workflow](#)

US Buildings | Geospatial website

Designed and built a browser GIS for footprint and height exploration, dataset comparison, available-height 3D display, and data export. Connected live USBF data and added local imports, scoped analysis, and map export.

[Open website](#)

RESEARCH EXPERIENCE

Graduate Research Intern | Oak Ridge National Laboratory

2025

Worked with the NBEM team on building-footprint integration and calibration for AutoBEM and the downstream effects of footprint geometry on building energy modeling.

Research Intern | Chinese Academy of Sciences

2021 - 2022

Analyzed GRACE and MODIS observations of water resources, grain-planting patterns, and crop-residue burning; contributed data processing, visualization, and scientific writing.

EDUCATION

University of Tennessee, Knoxville

2023 - Present

PhD in Geography (in progress) | Advisor: Qiusheng Wu

The Ohio State University

2018 - 2020

MS, Environmental Science | Advisor: Kaiguang Zhao

Liaoning University of Technology

2014 - 2018

BS, Environmental Science

SELECTED PUBLICATIONS

Rui Zhou, Frank Colin Moser, Yanan Feng, Mingzhou Jin, and Bo Zou (2026). Hydrogen logistics network design for hydrogen fuel cell electric long-haul trucks. *International Journal of Hydrogen Energy*, 215, 153889.

DOI: [10.1016/j.ijhydene.2026.153889](https://doi.org/10.1016/j.ijhydene.2026.153889)

Feng, Y. & Wang, J. (2022). Detecting the spatial mismatch of water resources and grain planting pattern changes in China based on satellite data. *Frontiers in Environmental Science*.

Hu, T., et al., including Feng, Y. (2021). Mapping fine-scale human disturbances in a working landscape with Landsat time series on Google Earth Engine. *ISPRS Journal of Photogrammetry and Remote Sensing*.

SKILLS

Python, R, GIS, remote sensing, Google Earth Engine, deep learning, geospatial visualization, high-performance computing, reproducible data workflows.