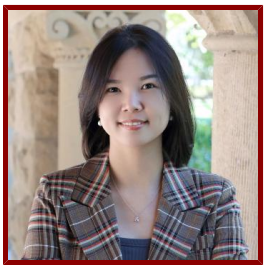
Stanford



Luwen Wan

Postdoctoral Scholar, Earth System Science

Bio

BIO

Luwen is a Postdoctoral Fellow with the Stanford Institute for Human-Centered Artificial Intelligence, working with Dr. Kate Maher, Professor at Stanford University in the Department of Earth System Science. Her postdoctoral research focuses on developing tools for tracking the recovery and activity of the North American beaver from a computer version and evaluating beaver as a tool for fostering sustainable waterways. She received her Ph.D. in Earth and Environmental Science from Michigan State University, where she worked on nutrient transport modeling across the Great Lakes Basin and agricultural tile drainage mapping across the US Midwest region.

INSTITUTE AFFILIATIONS

- Postdoctoral Fellow, Institute for Human-Centered Artificial Intelligence (HAI)

HONORS AND AWARDS

- HAI Postdoctoral Fellowship, Stanford Institute for Human-Centered Artificial Intelligence (2023)
- Dissertation Completion Fellowship, Michigan State University (2022)
- The best student presentation in the Session, AGU Fall 2021 Meeting (2021)
- KBS LTER Summer Research Fellowship, KBS LTER (2021)
- Lucile Drake Pringle and Gordon H. Pringle Endowed Fellowship, EES, Michigan State University (2020)

STANFORD ADVISORS

- Kate Maher, Postdoctoral Faculty Sponsor

LINKS

- Google Scholar: https://scholar.google.com/citations?user=JOQbhegAAAAJ&hl=en

Publications

PUBLICATIONS

- **Mapping agricultural tile drainage in the US Midwest using explainable random forest machine learning and satellite imagery.** *The Science of the total environment*
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- **Important Role of Overland Flows and Tile Field Pathways in Nutrient Transport.** *Environmental science & technology*
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- **The land use legacy effect: looking back to see a path forward to improve management** *ENVIRONMENTAL RESEARCH LETTERS*
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- **The effects of landscape pattern evolution on runoff and sediment based on SWAT model** *ENVIRONMENTAL EARTH SCIENCES*
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- **Impacts of international trade on global sustainable development** *NATURE SUSTAINABILITY*
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- **Spatially explicit quantification of the interactions among ecosystem services** *LANDSCAPE ECOLOGY*
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