



*Department of Geography and Environmental Sustainability*

***The University of Oklahoma®***

## **Two Graduate Student Positions for Fall 2024**

The Agri-Urban Interactions GeoAI Lab at the University of Oklahoma has two fully funded openings for graduate students who are passionate about conducting research focused on two primary areas: **1) agricultural irrigation water use** and **2) agriculture-urban land use competitions**. Their work will contribute to our ongoing USGS and NASA funded projects investigating the spatial and temporal variations of agricultural land and water use for improved management of finite resources to support the growing demands of both urbanization and food production.

Successful candidates will join a dynamic, highly collaborative, and interdisciplinary team that integrates geospatial data, data-driven and physical models, field surveys, and machine learning to understand complex agriculture-urban land and water use conflicts. As part of our research group, students will work closely with governmental agencies, research institutes, policymakers, growers, and environmental groups with the aim to translate our rigorous scientific findings into actionable change.

We are seeking candidates who are interested in publishing papers in scientific journals, communicating the results of science to broader audiences, and are proficient in English, both in speaking and writing. Knowledge of agricultural irrigation and experience in large-scale land use/cover mapping are preferred. In addition to research, candidates will also have opportunities to serve as graduate teaching assistants in the later years of study.

**Preferred qualifications** include some of the following:

- Expertise in remote sensing and GIS.
- Familiarity with agriculture, irrigation, urbanization, water use, and land use.
- Experience in using cloud computing resources (e.g., Google Earth Engine) and machine learning for large-scale land use/cover mapping.
- Possess a bachelor's degree (with research experience) or an M.S degree.
- Good English communication and writing skills.

The Department of Geography and Environmental Sustainability at the University of Oklahoma is a vibrant and continuously evolving department with the mission to conduct innovative and socially relevant research; to expand students' intellectual vistas via critical perspectives and valuable tools and skills; and to catalyze sustainable human-natural systems. The city of Norman, OK is recognized as one of the best small cities in the U.S., with modest living costs, easy access to metropolises (e.g., Dallas and Oklahoma City), and an inclusive and welcoming environment.

For more information:

The Department of Geography and Envi Sustainability: <https://www.ou.edu/ags/geography>

The University of Oklahoma: <https://www.ou.edu/>

City of Norman, OK: <https://www.normanok.gov/>

**To apply**, please submit a cover letter detailing qualifications, interests, and career goals, CV, and phone and email addresses of three references to Dr. Yanhua Xie ([yanhua.xie@ou.edu](mailto:yanhua.xie@ou.edu)). Finalists will be contacted by November 30, 2023; Application deadline is January 15, 2024.