



December 5, 2024

Description: The Landscape Modeling lab at CSU seeks an MS student to start May 2025. Research in the lab centers around remote sensing of landscape-scale wetland dynamics in both interior and coastal systems to identify processes related to ecosystem resiliency and long-term landscape change. This successful applicant will work on a USDA funded project centered on remote sensing of surface water flooding and other wetland carbon-related characteristics in interior depressional CRP wetlands, with a special focus on the playa lakes in the US semi-arid High Plains (TX, KS, CO, NE). The project will involve field work on private lands in shortgrass prairie landscapes. Field collection includes soil cores by hand sampling, vegetation, water, remote sensing data, and chamber based greenhouse gases. The applicant will coordinate with rural landowners for site access and network with collaborators and stakeholders. Training in data science and open-source geospatial informatics skills will be provided. Students will also have the opportunity to network with a broad set of potential collaborators as part of this USDA funded project.

Salary: Students will be supported with at least 1.5 yrs of GRA and 0.5 years of GTA at \$32,000 per year. Tuition and health insurance are included during GRA/GTA appointments.

Required qualifications: Candidates must be able to conduct independent field research and be able to lead a field team of inexperienced researchers. The ability to work outdoors in hot, physically demanding environments is required. A US drivers license or international equivalent and the ability to navigate long hours in remote rural locations is required. This project also requires strong project management and organizational skills.

Desired additional qualifications: Experience in wetlands research, vegetation or carbon research, remote sensing analyses, programming in a statistical language, and data science and reproducible workflows are potentially useful skills. A strong background in either environmental science, ecology, geography, or remote sensing are also useful.

Location: This position is within the Landscape Modeling Lab (www.landscape modeling.net) in the Department of Ecosystem Science and Sustainability at Colorado State University. We are located in Fort Collins, CO, adjacent to the Rocky Mountains. There is abundant open space and hiking trails nearby.

Timing: Start date is May 2025, and commences with the summer 2025 field season. Class work starts fall 2025.

To apply: The lab strongly encourages all applicants to apply, regardless of demographics or nationality. Please send a cover letter outlining your interests and goals (no more than 2 pages), a curriculum vitae, and contact information for references. In your cover letter, please include your available start date, your past research experience, your experience with outdoor field work, your ability to be a field crew leader, and if you have a valid drivers license. These materials should be emailed as a single pdf to Jessica O'Connell (jessica.oconnell@colostate.edu), Assistant Professor, CSU. For more about the lab, see: www.landscape modeling.net.