Title: Postdoctoral Researcher in Ecological Geostatistics and Remote Sensing at the University of Nevada, Reno

Summary:

The Global Environmental Analysis and Remote Sensing Laboratory (GEARS, https://www.gearslab.org/) at the University of Nevada, Reno (UNR) is focused on addressing questions of the impacts of climate change and land use/land cover change on vegetated ecosystems using remote sensing data. Based in Reno, NV, GEARS provides state-of-the-art, big data geospatial science and tools to land management agencies to help support forest fuels and carbon management decision making. GEARS is currently seeking a postdoctoral researcher with expertise in geostatistics, big data geospatial computation, remote sensing, and environmental science for a large, interdisciplinary project focusing on multi-state mapping of forest fuels using cloud computing technologies. This project is a collaboration between UNR, the USDA Forest Service, CALFIRE and the California Air Resources Board.

Duties:
The successful candidate will work under the direct supervision of Dr. Jonathan Greenberg (UNR) and Mr. Carlos Ramirez (USDA Forest Service) and in collaboration with scientists of CALFIRE and the California Air Resources Board. A large part of this position will be developing geostatistical workflows to estimate forest fuel characteristics and their uncertainties, and working with software developers to implement these workflows at scale. The responsibilities of this position include:
- Work with the principal investigators and collaborators to develop and implement a geostatistical framework for predicting forest fuels and their uncertainties (50%)
- Work with software developers to port geostatistical workflows to cloud environments (10%)
- Develop and distribute reproducible code and documentation via version control (e.g. GitHub) (5%)
- Supervise and mentor graduate students working on the project (15%)
- Draft and submit manuscripts for publications related to the project (20%)

Minimum requirements of the position:
PhD in Statistics, Geography/GIS, Forestry, Environmental Science or the equivalent
Strong record of publications
Able to work in a diverse, interdisciplinary group of researchers and land managers

Related experience
- Experience with Google Earth Engine.
- Experience with cloud computation (e.g. GCP or Amazon Web Services).
- Knowledge of remote sensing theory and practice as applied to forested ecosystems
- Knowledge of fire ecology and management.
- Experience working with federal, state and local land management agencies.
- R and Python programming.

Schedule or Travel Requirements:
Flexible hours and the successful applicant can work from home.
Weekly project meetings.
Quarterly meetings with land managers with potential one-day travel.
Annual conference participation.
Ability to work extended hours as needed to achieve project goals.

Deadline: We will begin reviewing applications on September 15, 2021. Applications received before this deadline will be given full consideration. We expect the candidate to start by October 31, 2021.

To apply:
Please send a cover letter, CV, and contact information for three references to jgreenberg@unr.edu.

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