UC RIVERSIDE — Environmental Sciences Department — Digital Agronomy Lab.

Postdoctoral Researcher in Broad-Scale Remote Sensing of Soil Salinity

Summary

The Digital Agronomy Lab (https://sites.google.com/site/scudieroe/) at the Environmental Sciences Department of the University of California Riverside invites highly enthusiastic candidates to apply for a Postdoctoral Fellow position in **broad-scale remote sensing of agricultural soil salinity**. The postdoctoral researcher will harmonize available soil survey datasets that will be used to calibrate and evaluate machine learning (e.g., random forests) regression models to estimate rootzone (e.g., 0-1 m) soil salinity in agricultural soils using time-series data from, e.g., MODIS, Landsat, Sentinel satellites and other available geospatial covariates. The postdoctoral researcher is expected to publish research findings in peer-reviewed technical journals.

Minimum Qualifications

- Ph.D. in Remote Sensing, Geospatial Analytics, Computer Science, Environmental Science, Soil Science, Agronomy, Geography, and/or a related discipline.
- Advanced knowledge of GIS and remote sensing platforms and instruments (multispectral and thermal; MODIS, Landsat, Sentinel)
- Demonstrated experience with machine learning regression modeling
- Demonstrated ability to conduct spatial and temporal analysis and manage large databases

Preferred Qualifications

- Hands-on experience with remote sensing and geographic information science for mapping and monitoring agricultural plant and soil regional-scale processes
- Strong publication record
- Strong spatial statistics background
- Strong programming skills with scripting languages such as Python, R, …
- Experience with one or more machine learning packages such as PyTorch, Keras, or scikit-learn
- Experience working in a collaborative research environment.

How to apply

Applications or informal inquiries can be sent to Dr. Elia Scudiero (elias@ucr.edu) with "REMOTE SENSING POSTDOC" & your name as the subject line.
Applications packages should contain the following contents:

- One-page cover letter;
- Two-page research statement in the application package (describe candidate's past research and future research plans)
- Curriculum vitae;
- Names, addresses, emails, and phone numbers for 2 references.

Duration
The start day will be August 15, 2020 or as soon as possible after that. The initial appointment will be for one (1) year with the possibility of renewal based on performance and availability of funds.

Location
Office and laboratory space for this position will be at the USDA-ARS U.S. Salinity Laboratory (450 West Big Springs Road, 92507 Riverside, CA), which is located on the University of California Riverside campus.
The University of California Riverside is a world-class research university with an exceptionally diverse undergraduate student body. Its mission is explicitly linked to providing routes to educational success for underrepresented and first-generation college students. A commitment to this mission is a preferred qualification.
The University of California is an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability, protected veteran status, or any other characteristic protected by law.

More information:
Salary Scale
https://www.ucop.edu/academic-personnel-programs/_files/1920/2020-postdoc-scales/t23.pdf

University of California Postdoc Union (For more information about work conditions and rights as a UC postdoc)
http://uaw5810.org/

The University of California, Riverside Postdoctoral Association (Ask them about life at UCR as a postdoc)
https://rpa.ucr.edu/