POSITION: Climate Data Scientist, UCLA

About the Center for Climate Science

We conduct research that helps communities better understand how climate change will affect them and how to respond. We work with communities to produce information they can put into action, and we engage the public so they are empowered to advocate for their futures. In the process, we build interdisciplinary research teams that bring to the table expertise in climate science, ecology, policy, and other vital fields. We also train the next generation of scientists to think outside the traditional boxes of academia and solve problems in the real world.

The UCLA Center for Climate Science, directed by Prof. Alex Hall, seeks a climate data scientist contributing to computing infrastructure for regional climate change research, in support of a multidisciplinary modeling team.

What you will do:

The climate data scientist will manage large gridded geospatial datasets for a group of a dozen scientists, including local instances of large public datasets, and the output of simulations conducted in the group (order petabytes) which is being archived on AWS. They will require strong familiarity with AWS systems in order to manage, and support external users of, these data. They will also collaborate with the unit IT department to manage storage space, data backup, and jobs on local servers at UCLA.

In addition to these important data and systems administration tasks, this position will also involve assisting with data processing workflows for geospatial data, including managing scripts to post-process data from the Weather Research and Forecasting (WRF) model, bias-correction procedures, and the archiving of data in the netCDF format. Finally, the successful applicant will ideally be interested in documentation of workflows and processes, management of the group GitHub page, and onboarding scientists to these practices.

Qualifications:

- a Bachelor's degree (M.S. preferred) in Atmospheric Sciences or a related geoscience field, with coursework and/or work experience in computer systems management.
 Applicants with degrees in computer science combined with coursework in the geosciences could be considered.
- some experience using Amazon Web Services (AWS) and their systems, preferably: bucket creation and access management for multiple users on AWS Simple Cloud Storage (S3), AWS Command Line Interface (AWS CLI), Elastic Computing (EC2), and Amazon SageMaker.
- overall competence with the management, organization, and transfer of large gridded geospatial datasets (Tb to Pb in scale)
- Strong familiarity with Python, Jupyter, and Anaconda environments
- Interest in open-source, version control best-practices, and documentation
- independent problem-solving, strong verbal and written communication, the ability to work effectively in a team, and interest in climate and sustainability.

How to Apply:

Applicants should submit (1) a complete CV, including contact information for three references, and (2) a cover letter that highlights relevant experience, and describes alignment with the mission of the Center for Climate Science. Efforts and interest in action around climate change, sustainability, and diversity and inclusion in STEM are especially welcome. These materials should be addressed to Ms. Elease Lui Stemp at elstemp@atmos.ucla.edu. Please mention where you saw this posting. Consideration of applications will begin in January 2021 and continue until the position is filled. Initial work will be remote, with the possible need to relocate to Los Angeles as soon as fall 2021.

Benefits of working at the Center for Climate Science at UCLA:

We are a diverse and collaborative team of scientists, dedicated and mission-driven to improve regional resilience to climate change by producing and sharing impact-relevant climate data and analyses. Your efforts in support of this work will expedite our delivery of these important benefits for California and beyond.

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, disability, age or protected veteran status. For the complete University of California nondiscrimination and affirmative action policy, please follow this link: http://policy.ucop.edu/doc/4000376/NondiscrimAffirmAct.

For more about Prof. Hall's research activities, visit http://dept.atmos.ucla.edu/alexhall and www.ioes.ucla.edu/climate.