The UCLA Center for Climate Science has an opening for:

POSTDOCTORAL POSITION IN MACHINE LEARNING AND CLIMATE

The UCLA Center for Climate Science is searching broadly for a talented postdoctoral scholar to work with Prof. Alex Hall and his research group, contributing to research that utilizes machine learning methods to better understand local to global climate variability and change. The term would initially be for two years, but is renewable for at least one additional year, contingent on funding and satisfactory progress.

The postdoctoral researcher will have freedom to pursue projects of mutual benefit, and will generally employ various explainable AI/ML techniques to address questions related to shifts in average climate conditions and the frequency of extreme weather events. Data sources include observations, global climate model output, and dynamically downscaled data at the regional scale across the United States. (The group has generated an unprecedented trove of multi-model regional high resolution future climate change projections.) These methodologies will be utilized to enhance the transparency and interpretability of predictive models dealing with complex climate data. Possible research areas include detection and attribution of hydroclimate signals, enlargement of high resolution regional ensembles through AI-based downscaling, building frameworks for reducing uncertainty in climate model projections, isolating the role that different climate forcings (e.g. aerosols) exert on recent trends, and improving predictability of hydroclimate change on annual to decadal time-scales.

Applicants must have a Ph.D. in Atmospheric/Climate Sciences, Computer/Data Science, or a related field. Experience using both climate models and a variety of machine learning packages (e.g. TensorFlow, PyTorch, Scikit-learn). Coursework or publications specific to climate research is preferred. The successful applicant will demonstrate independence in research, exceptional problem-solving skills, strong verbal and/or written communication, and the ability/desire to work effectively in a team. Strong programming skills (Python preferred) with emphasis on open-source, version control best-practices, documentation, and collaborative projects are expected. Lastly, candidates with experience using Linux-based high-performance computing clusters are preferred as this position will benefit from the NCAR-Wyoming Supercomputer Center which houses a 20 PFLOP CPU+GPU-capable machine.

How to Apply:
Applicants should submit (1) a statement of research interests and goals, no longer than one page, (2) a complete CV, including contact information for three references, and (3) a cover letter that discusses 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 Elease Stemp at RecruitCCS@atmos.ucla.edu. Please identify the position in the subject header and mention where you saw this posting in the body of the email. Consideration of applications will begin in May 2024 and continue until the position is filled. The applicant should ideally be available to start by the fall of 2024.

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.

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