Postdoctoral Research Associate – Hydrologic Modeler

Position Description

The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) at The University of Oklahoma (OU) is seeking a Postdoctoral Research Associate to contribute to NOAA's Warn-on-Forecast (WoF) program in collaboration with CIWRO and National Severe Storms Laboratory (NSSL) scientists. This position will focus on advancing hydrologic modeling for flash flooding. The position is part of the Data Assimilation and Modeling (DAM) team at CIWRO, located in the National Weather Center (NWC) in Norman, Oklahoma.

Overview

CIWRO, NSSL, and the OU School of Meteorology, all housed within the NWC, share a long history of collaboration in storm-scale research and research-to-operations (R2O) transitions. The CIWRO DAM team works closely with NSSL scientists to advance NOAA's Warn-on-Forecast System (WoFS) for flash flood prediction. This position will play an important role in the continued development of WoFS by supporting the coupling, evaluation, and application of the Flooded Locations and Simulated Hydrographs (FLASH) hydrologic model within the WoFS framework.

As a CIWRO Postdoctoral Research Associate, you will:

- Develop the coding infrastructure needed to couple FLASH with the WoFS codeset.
- Evaluate forecast output against gauge observations, local storm reports, and other relevant verification datasets.
- Create decision-support tools that stakeholders can use to analyze and interpret WoFS-driven flash flood forecasts.
- Serve as lead author and contributing author on scientific manuscripts for publication in peer-reviewed journals and present research findings at conferences and workshops.
- Creatively and efficiently solve scientific problems, both independently and as part of the WoFS team.

Qualifications

- A PhD in a STEM field relevant to the position.
- Experience working with hydrologic models.
- Strong computer programming experience.
- Excellent written and oral communication skills, with evidence of scientific publication and presentation.
- Ability to work both independently and collaboratively as part of a multi-institution, interdisciplinary team.

Benefits and Work–Life Balance

- Competitive salary based on experience and comprehensive university benefits.

- Generous paid leave, encompassing 14 paid holidays and 22 hours of accrued paid time off per month.
- Reduced membership at the University of Oklahoma's state-of-the-art fitness and aquatic center.

More details about working at the University of Oklahoma, benefits packages, as well as living in Norman, Oklahoma are provided on the website: https://www.ou.edu/hr.

How to Apply

Applications should be emailed to ciwro-careers@ou.edu, Attn: HYDRO, and include:

- A cover letter highlighting your interest in the position and describing how you meet the position qualifications,
- The names and contact information for three references
- Your résumé/CV

The cover letter must highlight your relevant qualifications and how they can contribute to the WoFS team. Applications will be accepted until the position is filled. The starting date is negotiable.

The University of Oklahoma is an Equal Opportunity/Affirmative Action employer.