Research Associate/Scientist – Probabilistic Hazard Information (PHI) Applications

Position Description

The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) at The University of Oklahoma (OU) is currently seeking a Research Associate or Research Scientist to advance the Probabilistic Hazard Information (PHI) project in collaboration with CIWRO and National Severe Storms Laboratory (NSSL) scientists. The position focuses on developing scientific applications, algorithms, and applied research that support forecasters in the warning decision-making process for severe convective weather events. This position is part of the Severe Convective Probabilities and Impacts (SCPI) team at CIWRO, located in the National Weather Center (NWC) in Norman, Oklahoma.

Overview

CIWRO, NSSL, and the School of Meteorology at OU, housed within the NWC in Norman, Oklahoma, share a strong history of collaboration in severe storms research, warning decision support, and research-to-operations transitions. This position will support NOAA's PHI project, which is focused on advancing probabilistic guidance, applications, and tools that help forecasters analyze and communicate severe convective weather threats. In this role, you will collaborate with CIWRO and NSSL scientists, NWS forecasters, and other partners to develop and evaluate algorithms and applications for short-term probabilistic prediction, tracking, nowcasting, and verification. The position will also support applied research and Hazardous Weather Testbed experiments to improve how severe convective hazards are communicated in warning decision-making.

Job Responsibilities

- Design, implement, and test emerging algorithms and techniques including AI/ML methods, for short-term probabilistic prediction, tracking, nowcasting, and verification.
- Apply knowledge of severe local storms and current advances in meteorology and remote sensing to develop applications and tools that improve probabilistic hazard guidance and warning decision-making.
- Contribute to applied research and operational experiments in the Hazardous Weather Testbed and with NWS forecasters that facilitate the evolution of how severe convective weather threats are analyzed and communicated
- Contribute to peer-reviewed manuscripts and present results at conferences, workshops, and project meetings.
- (Research Scientist only) Build and sustain research portfolio aligned with PHI and severe weather warning priorities, including lead-author publications and competitive proposals.
- (Research Scientist only) Provide scientific leadership to advance PHI applications and warning decision-support capabilities.

Qualifications

- Ph.D. (Research Scientist) or M.S. (Research Associate) in Atmospheric Science, Meteorology, or a related field.
- Experience with scientific programming using a high-level language, such as C++, Java, or Python.
- Experience with statistical methods or software for meteorological data analysis and visualization
- Ability to work effectively in a collaborative, multidisciplinary research environment, with strong written and verbal communication skills.

Benefits and Work-Life Balance

Joining our team comes with numerous benefits, including:

- Competitive salary based on experience; comprehensive university benefits (http://hr.ou.edu/).
- 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 (https://www.ou.edu/far).

More details about working at the University of Oklahoma, benefits packages, as well as living in Norman, Oklahoma are provided on our website: https://jobs.ou.edu/Discover-OU.

We are dedicated to promoting a healthy work-life balance by championing a flexible work culture, offering adaptable work hours and a hybrid work arrangement. This empowering framework enables team members to seamlessly navigate personal commitments while effectively contributing to their professional responsibilities.

Application Process

Applications should be mailed to ciwro-careers@ou.edu Attn: PHI and include a cover letter, the names and contact information for 3 references, and your resume/CV. The cover letter must highlight your relevant qualifications and how they can contribute to the PHI 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.