Research Associate – Convection-Allowing Modeling and Testbed Support

Position Description

The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO) at The University of Oklahoma seeks a Research Associate to support NOAA's Hazardous Weather Testbed (HWT) and Warn-on-Forecast System (WoFS) initiatives in collaboration with NOAA's National Severe Storms Laboratory (NSSL). The position focuses on providing convection-allowing model (CAM) expertise for real-time and retrospective research-to-operations activities, supporting HWT experiments, coordinating data delivery with the Storm Prediction Center, and advancing WoFS visualization within the National Weather Service (NWS) Hazardous Information Visualization Environment (HIVE). The position is located at the National Weather Center in Norman, Oklahoma.

Overview

CIWRO and NSSL have a longstanding collaboration in storm-scale modeling, data assimilation, ensemble forecasting, and research-to-operations transitions. WoFS is a rapidly updating ensemble prediction system that provides location-specific probabilistic guidance for severe storms, damaging winds, hail, heavy rainfall, flash flooding, and other high-impact weather. Testbed environments serve as vital proving grounds for evaluating cutting-edge numerical weather prediction tools with operational forecasters and researchers.

The successful candidate will provide domain expertise across WoFS and broader convection-allowing modeling platforms during real-time testbed runs and retrospective research studies. Key responsibilities include ensuring seamless WoFS data delivery to the SPC for the SFE, supporting NSSL's CONUS-scale real-time modeling systems, and partnering with NWS HIVE developers and forecasters to define functional requirements and optimize user-centered visualization workflows.

Job Responsibilities

- Provide CAM expertise to support NSSL's CONUS-scale real-time modeling operations, retrospective evaluations, and HWT activities, including troubleshooting workflows, ensuring reliable data delivery and incorporating participant feedback into future development
- Coordinate with the Storm Prediction Center on WoFS-related activities and workflows to ensure reliable data delivery for the annual Spring Forecasting Experiment
- Collaborate with the NWS HIVE developers and operational partners to enhance WoFS visualization by identifying requirements, establishing points of contact, and developing representative operational use cases
- Work closely with NSSL scientists, CIWRO researchers, operational forecasters, and software engineers to facilitate the transition of WoFS research capabilities into NWS operations

Qualifications

- Master's degree in Meteorology, Atmospheric Science, or a related field with at least two years relevant professional or research experience
- Demonstrated experience working with convection-allowing numerical weather prediction models (e.g., MPAS, WRF or FV3-based CAMs) or ensemble prediction systems
- Strong programing and scripting skills (e.g., Python, Linux shell scripting) for atmospheric data processing, analysis, and workflow automation.
- Excellent communication, collaboration, and stakeholder-coordination skills across interdisciplinary scientific, operational, and development teams.

Benefits

Joining our team comes with numerous benefits, including:

- Competitive salary based on experience and comprehensive university benefits (http://hr.ou.edu/).
- Generous paid leave, encompassing 15 paid holidays and 22 hours of paid time off per month.
- Reduced membership rates at The University of Oklahoma's state-of-the-art fitness and aquatic center (https://www.ou.edu/far).

Application process

Email applications to ciwro-careers@ou.edu with the subject line "ATTN: CAM" Include a cover letter describing your interest and qualifications, an up-to-date resume/CV, and the names and contact information of three professional references. Applications will be accepted until the position is filled.

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