

Numerical Weather Prediction (NWP) Research Scientist

Overview:

The Center for Analysis and Prediction of Storms (CAPS) at the University of Oklahoma is seeking a research scientist or research associate to participate in research of cutting-edge numerical weather prediction (NWP) and ensemble weather prediction to improve forecasts of high impact weather, including NOAA-funded projects on flash flood prediction, winter weather predictions, and the design and evaluation of the next-generation Rapid Refresh Forecast System (RRFS) ensemble for severe storm forecasting. These projects utilize NOAA's next generation FV3-LAM model as part of the Unified Forecast System.

Job Responsibilities:

- Set up and maintain CAPS forecast systems, including coordinating the implementation of new and updated model capabilities for research and realtime forecasting.
- Perform real-time ensemble NWP forecasts using FV3-LAM to support CAPS research projects. Some remote evening and nighttime work may be required during special operating periods.
- Contribute to the objective verification of CAPS ensemble FV3-LAM forecasts.
- Attend professional meetings and conferences to present research results, and publish findings in peer-reviewed academic journals.

Required Qualifications:

- A Ph.D. (to be appointed as a post-doc or research scientist) or Master's degree (for a research associate appointment) in meteorology, atmospheric science, or a closely-related field.
- At least one year of experience working with numerical weather prediction models (e.g., WRF, FV3, ARPS) in a Linux environment.
- At least three years of experience in scientific programming and computing on Linux systems using high-level programming languages (such as Fortran and/or Python).
- Ability to work independently and troubleshoot issues in community modeling software packages.
- Ability to communicate effectively in meetings, research presentations, and formal publications.

Desired Skills:

- Ability to manage complex computing tasks on high-performance computing systems.
- Experience with developing or modifying workflow automation using, e.g., Linux/Unix shell scripts, Python, and/or Rocoto.
- Familiarity with methods and software for NWP forecast visualization, evaluation, and verification, such as Python plotting packages, Model Evaluation Tools (MET), etc.

- Familiarity with accessing and downloading weather data via platforms such as AWS and/or UNIDATA LDM.

Salary and Benefits

Beginning salary will be commensurate with experience and the position appointed. There are opportunities for promotion and raises. Full-time employment with OU research staff benefits, including generous paid leave, health insurance, and retirement savings plans. Flexible scheduling and some hybrid work are permitted. Rewarding work environment in the National Weather Center, collaborating with academic and operational partners. The University and City of Norman offer numerous recreational and cultural activities, with the amenities of a larger city, just 20 miles away in Oklahoma City. Norman has a low cost of living compared to most cities (<https://bit.ly/livenorman>).

How to Apply:

Send a statement of interest highlighting how you meet the position qualifications, your resume/CV, and a list of three professional references to: Keith Brewster, kbrewster@ou.edu. Questions about the position may also be directed via email to Dr. Brewster.

This position will remain open until filled, and formal review of applications will start on December 9, 2022.

The University of Oklahoma is an Equal Opportunity/Affirmative Action employer, and applications are encouraged from underrepresented groups.