CIMMS Research Associate - MRMS Meteorological Analyst

The Cooperative Institute for Mesoscale Meteorological Studies (CIMMS) at the University of Oklahoma is currently seeking a research associate to collaborate with scientists in the National Severe Storms Laboratory's (NSSL) Warning Research & Development Division on the development of scientific applications, algorithms, and applied research related to improving Multi Radar/Multi Sensor (MRMS) quantitative precipitation estimates and other hydrological applications used by operational forecasters in the warning decision-making process for flash flood and river flooding events. MRMS is a operational software system that contains a number of algorithms used to ingest multiple sources of environmental information, analyze the data and produce severe weather, hydro-meteorological and transportation based products, many of which are used by National Weather Service (NWS) forecasters as well as the private sector and academia.

The duties of this position are:

1. Advancing the scientific understanding of MRMS quantitative precipitation estimate (QPE) biases and data quality discontinuities via basic and/or applied research and development
2. Developing and/or testing new (e.g., radar and satellite) precipitation algorithms as well as furthering machine learning approaches, all with the goal of further improving MRMS precipitation estimates
3. Develop interfaces (decoding, remapping) between external data (e.g., satellite, model, gauge data etc.) and MRMS algorithms
4. Attend meetings and professional conferences to present research results and interact with collaborators and users; formally publish results when appropriate
5. Review technical and professional publications and attend seminars to stay abreast of current developments in meteorological and remote sensing science

The minimum qualifications for the position are:

1. A M.S. Degree in Meteorology, Atmospheric Science, or related area, or a M.S. Computer Science with experience working in meteorological applications. An equivalent qualification would be a B.S. degree in one of the areas mentioned with 3 years of fulltime work experience.
2. Experience with scientific programming on UNIX/Linux using a high level language (e.g. C, C++, Python)
3. Experience with statistical methods and software for meteorological data analysis and visualization (e.g. MATAB, GIS, etc.)
4. Ability to communicate scientific research through conference presentations, formal publications and technical documents

Applicants should identify expertise with any of the following areas: Remote Sensed Precipitation Estimates and Measurements; Flooding; Hydrology; Weather Radar; Satellite; Statistics; Warning Decision Making; Numerical Modeling, Cloud Processing, Machine Learning. Strong oral and written communication skills are needed for the position. Please indicate experience with Linux (or UNIX) operating systems, programming skills, Cloud processing, MATLAB and Geographic Information Systems.

Normal working hours will be observed except for occasional irregular hours during data collection, field experiments or workshops conducted at remote sites. Incumbents will receive training and gain expertise in the latest radar and other remote sensing technology and warning decision-making.

Supervision will be provided by CIMMS staff. Technical oversight will be provided by CIMMS staff, NSSL scientists, and NSSL management. Works under general supervision but is expected to determine action to be taken in handling all but unusual situations. Incumbents in this position are not expected to supervise other employees, but may serve as leaders of technical teams and supervise students.

The beginning salary will be based on qualifications and experience with University benefits. Information on benefits may be found at http://www.hr.ou.edu. The position is expected to begin July 2021.

To apply for the position, please forward your resume, cover letter and list of three references to:

CIMMS Careers
University of Oklahoma CIMMS
120 David L. Boren Blvd., Suite 2100
Norman, OK 73072-7304
CIMMS-careers@ou.edu
ATTN: MRMS Meteorological Analyst

The University of Oklahoma is an equal opportunity/Affirmative Action employer.