CIWRO Post-doctoral Research Associate - SCOURS Postdoc

The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO), formerly known as CIMMS, at the University of Oklahoma is seeking a Post Doctoral Research Associate to collaborate with National Severe Storms Laboratory (NSSL) on high-wind impact research using Uncrewed Aerial Systems (UASs). The incumbent is expected to work as part of the *S*evere *C*onvective *O*bservations using *U*AS, *R*adar, and *S*imulations (*SCOURS*) team to collect and analyze high-wind damage data from UASs and satellite imagery with the aim of better characterizing high-wind damage and improving the current understanding of severe storms. This position will focus on 1) UAS-based high-wind damage data collection and analysis for field campaigns such as PERiLS and future VORTEX-USA-related activities as well as local events and 2) developing damage detection algorithms and workflows for data dissemination among research and operational partners.

The principal duties of this position are:
1. Assist in data collection, processing and dissemination (data-sharing workflows) of UAS high-wind damage information.
2. Provide expertise and contribute to the development of data dissemination workflows and damage detection algorithms, possibly employing machine learning techniques.
3. Collaborate with NOAA and other government agencies [e.g., NWS Weather Forecast Offices (WFOs) or FEMA] to provide subject matter expertise prior to and following high-wind impacts.
4. Contribute to science publications and attend off-site conferences, workshops, symposia and NOAA UAS related outreach events as needed.

The minimum qualifications for this position are:
1. PhD in Geography, Meteorology, Atmospheric Science, Computer Science, Engineering, Robotics, or related field.
2. Experience with UAS data collection, UAS image processing and related data workflows.
3. Experience with machine learning and/or other damage detection algorithms.
4. Obtain a remote pilot license (Part 107) within three months of start date.
5. Ability to communicate scientific research through conference presentations, formal publications and technical documents.

Applicants should identify experience with any of the following areas: Severe local storms, UAS data collection and analysis, satellite imagery analysis, computer science and engineering/robotics. Strong oral and communication skills are needed for the position, including the ability to collaborate on proposals, reports and articles. Please indicate experience with UAS image processing, data driven workflows, cloud computing, satellite imagery, Google Earth Engine, Geographic Information Systems (GIS), and programming skills (including Python, Java, Java Script).

Supervision will be provided by CIWRO staff. Technical oversight will be provided by CIWRO staff, NSSL scientists, and NSSL management. Applicant will work under general supervision but is expected to determine action to be taken in handling all but unusual situations. Normal working hours will be observed except for occasional irregular hours during data collection or workshops conducted at remote sites.

The beginning salary is commensurate with educational background and experience, with OU benefits. Information on OU's excellent benefits can be found at https://hr.ou.edu/Employees. The position will be located in Norman, OK (https://www.normanok.gov/about-norman) at the National Weather Center (https://www.ou.edu/nwc).

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

CIWRO Careers
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CIWRO-careers@ou.edu
Attn: SCOURS PostDoc

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