CIWRO Research Scientist – Uncrewed Aircraft System Applications Research and Development for High-Impact Weather

The Cooperative Institute for Severe and High-Impact Weather Research and Operations (CIWRO, formerly CIMMS) at The University of Oklahoma is currently seeking a Research Associate to collaborate with scientists at the National Severe Storms Laboratory (NSSL) in Norman, OK, on developing methods and applications for uncrewed aircraft systems (UAS) for high impact weather. This position focuses on developing best practices and methods for creating, processing, and analyzing high-resolution imagery from UAS and other airborne platforms (e.g., satellites) for land-surface assessment for a variety of geophysical applications. The position is based at CIWRO in Norman, Oklahoma within the National Weather Center.

Background:
CIWRO, NSSL, the School of Meteorology at the University of Oklahoma, and the broader research community at the National Weather Center (NWC) have long collaborated on pioneering research on mesoscale and boundary layer meteorology and severe storms and their impacts. The Boundary Layer Integrated Sensing and Simulation (BLISS) group at NWC is an example of this collaboration, and acts as an umbrella under which those with research interests in boundary layer meteorology can come together and collaborate. The CIWRO UAS research program is intricately involved in BLISS-related research activities at NWC. The incumbent in this position will be conducting land-assessments for applications including but not limited to, damage assessments following tornadoes and other hazardous weather events. The incumbent will also serve as a liaison between UAS research at NSSL & CIWRO and the NOAA Uncrewed Systems Research Transition Office (UxSRTO), the UAS division of the Office of Marine and Aviation Operations (OMAO) Uncrewed Systems Operations Center, and the FAA to ensure all NOAA policies and FAA regulations are met. The incumbent will be part of the collaborative and supportive BLISS team of researchers with diverse interests at NSSL and CIWRO, where this position adds to the breadth of ongoing research on UAS development and applications for high-impact severe weather.

The duties of this position are:

1. Obtain and maintain operator status on CIWRO and/or NOAA UAS platforms used for land-surface assessment and ensure the safe operation and maintenance of those aircraft
2. Lead and conduct field missions and data analysis focused on land-surface characterization datasets and support field missions of colleagues when feasible
3. Lead scientific proposals to correlate severe storm processes to UAS-based damage assessments and other data available at CIWRO/NSSL (e.g., radar, MRMS, etc)
4. Act as liaison for CIWRO and NSSL UAS operations in interactions with NOAA UxSRTO, OMAO Uncrewed Systems Operations Center, and FAA
5. Present findings and results via publications and presentations at national/international conferences
6. Build an independent UAS-based research portfolio while contributing to a collaborative research environment

The minimum qualifications for the position are:

- A PhD in Meteorology, Geography, or related area
- Experience obtaining and analyzing multispectral imagery
- Proficiency in geospatial methods/technologies

Applicants should identify expertise within any of the following areas: storm damage assessment; vegetation mapping and analysis; operation of spatial-imaging UAS; GIS software/tools; FAA regulations and airspace management; big data management; UAS operations; programming skills; cloud computing; meteorological observation data interrogation.

Normal working hours will be routinely observed with some occasional irregular hours during active field deployments. The incumbent is expected to earn their Part 107 operators license; they will receive training and gain expertise with the latest UAS and observation platforms available to the CIWRO and NSSL team.

Supervision will be provided by CIWRO staff. Technical oversight will be provided by CIWRO and NSSL scientists. The incumbent will work under general supervision but is expected to complete work independently and develop an independent research portfolio while still contributing to the group working environment.

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 has a preferred start date of January 2022.

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

CIWRO Careers
University of Oklahoma CIWRO
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ciwro-careers@ou.edu
JOB REFERENCE: BL UAS Science

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

The University of Oklahoma has a mandatory COVID-19 vaccine requirement, with exceptions only for approved medical or religious accommodations. As a condition of employment, newly hired employees must provide proof of vaccination or initiate the accommodations process before their first day of employment.