Tenure-Track Assistant Professor Position in Atmospheric Science: numerical modeling, remote sensing, AI/ML, and big data approaches to problems involving the atmosphere and/or the climate

The Department of Atmospheric Science together with the School of Computing at the University of Wyoming (UW) seek to fill a tenure-track assistant professor position beginning August 2023. This is one of three cluster hire faculty positions from departments across campus that will form the core of the School of Computing. The focus of this position is numerical modeling, remote sensing, AI/ML, and big data approaches to problems involving the atmosphere and/or the climate. This position also considers applicants from other STEM fields and competitive applicants should emphasize the use of AI/ML and/or Big Data in their research and may wish to contextualize their research (past and future) relative to other focus areas being considered for this position (see description of other areas of interest here).

The School of Computing will be fundamentally interdisciplinary, using translational research to leverage new and critical computing technologies and approaches for advancing grand challenge problems in science and society. The successful applicant will catalyze interdisciplinary collaboration, attract external research funding, and enrich the experience of UW students. Candidates may wish to specifically highlight research in inter/transdisciplinary work in relation to the desired qualifications outlined by the School of Computing (see link to posting below). The academic appointment and tenure home for this position will be in the School of Computing, with a joint appointment in the Department of Atmospheric Science. This will open opportunities for the applicant to perform interdisciplinary work with scientists in the School of Computing focusing on societal, computing, and data analysis problems.

In addition to being part of the School of Computing cluster hire, you will join a new cohort of faculty within the Department of Atmospheric science focusing on hydroclimate modeling and airborne atmospheric research, both of which are also slated to start in August 2023. The successful candidate for this position is expected to have a strong record of publications and promise of external funding success in the use of new and innovative computing techniques applied to numerical modeling, remote sensing, AI/ML, and big data approaches to problems involving the atmosphere and/or the climate. A focus in atmospheric remote sensing may include algorithm development and/or data analysis. This position offers tremendous opportunities to leverage collaborations with the National Center for Atmospheric Research (NCAR) and Wyoming’s computational and observational facilities. The successful candidate is expected to advise MS and PhD students and postdoctoral scholars.

Potential candidates should visit the job description at https://eeik.fa.us2.oraclecloud.com/hcmUI/CandidateExperience/en/sites/CX_1/job/223016/?utm_medium=jobshare for information on the desired qualifications and application details for this position. This search will remain open until the positions are filled. The candidate selection process will start on November 30th, 2022. Questions should be directed to the Search Committee Chair, Dr. Bryan Shader (BShader@uwyo.edu).

About the School of Computing
The School of Computing is a new academic unit at the University of Wyoming that focuses on the application of computing in and across all disciplines, and on delivering new academic programs that provide students with important computing and digital skills across all disciplines including supporting Digital for All. The School of Computing’s hiring plan over the next five years includes new tenure track faculty, many of whom will have joint appointments with other academic units. The School of Computing currently hosts some 33 Founding Adjunct Faculty from across the university, has in place an
Internal Advisory Board representing over a dozen academic areas, and is preparing undergraduate degree programs in Computing, Data Science, and Applied Software Development. The School is currently recruiting several research scientists to support its research and strategic initiatives and will have programs for undergraduate and graduate computing students in addition to visiting scholars.

About the Department of Atmospheric Science
The Department of Atmospheric Science operates as a graduate-only program and offers excellent opportunities in graduate education and research, using both observations and numerical modeling. Atmospheric Science Faculty cover a broad range of research topics that include air quality, aerosol impacts on clouds, cloud and precipitation development, climate change, small- and large-scale dynamics, and boundary-layer processes. The Department has five faculty members, several research scientists, and is on a growth trajectory with several new hires expected to join in August 2023.

The University of Wyoming King Air research aircraft is the cornerstone of our observational facilities and is funded as a National Facility under a cooperative agreement between the University of Wyoming and the National Science Foundation. The next-generation King Air facility is currently being built, with several new instruments on the horizon. The NCAR Wyoming Supercomputing Center represents a collaboration between NCAR and the University of Wyoming. Through the Wyoming-NCAR Alliance, 320 million core hours of the Derecho System are available for Wyoming-led projects in atmospheric, earth system, geological and related sciences.