



Job Description

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Job Details

Job Title	Postdoctoral Research Scholar - School of Earth Sciences and Environmental Sustainability	Job ID	602868
Location	Vice President for Research	Full/Part Time	Full-Time
Regular/Temporary	Regular	Favorite Job	☆

Special Information

- This position has identified funding for two years. Continued employment after that time period would depend on funding, satisfactory performance and departmental need.
- Not subject to layoff or recall status.
- Post-Doctoral Scholars are hired on a contract basis according to the terms of ABOR Policy 6-310, Conditions of Post-Doctoral Service, which may be found at: <http://azregents.asu.edu/rrc/Policy%20Manual/6-310-Conditions%20of%20Postdoctoral%20Scholar%20Service.pdf>
- This is a full-time position located at the NAU campus in Flagstaff, AZ
- A curriculum vitae, cover letter, statement of research interests and contact information for three professional references is required. References will be contacted only with prior permission of the applicant.
- Candidates must be eligible and available to begin the Post-doctoral Scholar appointment at NAU between July 1, 2017 and September 5, 2017.

Job Description

Position Summary:

Northern Arizona University (NAU) seeks a Post-Doctoral Scholar (Post-doc) to advance institutional research capacity in machine learning and data science in the field of paleoclimate dynamics. This interdisciplinary research will integrate new large, standardized paleoclimate datasets to develop dynamic environmental indices for the southwest United States, develop ensemble learning techniques for paleoclimate data and chronological ensembles, and develop robust outlier detection algorithms. The Post-doc will be integrated into the dynamic "Climate Change" research group in the School of Earth Sciences and Environmental Sustainability and will facilitate new collaborations among researchers at NAU, especially between the "Climate Change" research group and NAU's growing expertise in informatics and machine learning in the School of Informatics, Computing and Cyber Systems.

Examples of Duties:

- Develop dynamic environmental indices for the southwest United States
- Develop ensemble learning techniques for paleoclimate data and chronological ensembles,
- Develop robust outlier detection algorithms
- Train undergraduate and graduate researchers in relevant concepts and techniques
- Collaborate domestically and internationally with a diverse group of scientists
- Present research at national and international meetings and workshops
- Write and assist with the writing of research proposals to external sponsors.
- Publish research in high-quality peer-reviewed journals

Minimum Qualifications

- Earned PhD in Machine Learning, Data Science, Statistics or related field from an accredited research institution
- PhD conferred no earlier than August 31, 2013

Preferred Qualifications

- Record of publication in peer-reviewed literature
- Record of research funding
- Experience applying machine learning techniques to large, diverse datasets
- Experience in ensemble learning techniques
- Experience in outlier or anomaly detection techniques

Knowledge Skills and Abilities

- Ability to apply machine learning techniques to large, diverse datasets
- Ability to program effectively in Python, Matlab and/or R
- Knowledge of paleoclimate concepts and datasets
- Knowledge of ensemble learning
- Excellent written and verbal communication skills including oral presentation skills
- Ability to work effectively as a member of a research team
- Excellent organizational and project management skills
- Ability to work effectively with people from a variety of culturally diverse backgrounds

Background Information

Northern Arizona University requires satisfactory results for the following: a criminal background investigation, an employment history verification and a degree verification (in some cases) prior to employment. You may also be required to complete a fingerprint background check.

Additionally, as an employer in the state of Arizona, NAU is required to participate in the federal E-Verify program that assists employers with verifying new employees' right to work in the United States.

Finally, each year the Northern Arizona University Police Department releases an annual security report. The report is a result of the federal law known as the Clery Act and contains policy statements that address the school's policies, procedures and programs concerning safety and security including policies for responding to emergency situations and sexual offenses. The report contains three years of data for Clery reportable crime statistics for the campus along with the most current year's Fire Safety Report, which includes policy statements and fire statistics for Flagstaff on-campus student housing.

The report may be viewed at nau.edu/clery or by visiting the NAUPD website at: <http://www.nau.edu/police>. A printed copy of the report is available upon request by contacting the NAU Police Department, Records Department at (928)523-8884 or by visiting the department at Building 98A on the NAU Mountain Campus.

Salary