Postdoctoral Research Scholar – Center for Digital Antiquity

The Center for Digital Antiquity (CDA) within the School of Human Evolution and Social Change at Arizona State University is seeking a postdoctoral researcher for an 18-month appointment beginning in December 2023. In collaboration with CDA researchers, the successful applicant will work on the Comparative Digital Archaeological Studies sponsored by the Defense POW/MIA Accounting Agency (DPAA). The postdoctoral researcher will work with DPAA to explore how the management and organization of archaeological data can enhance its search and recovery efforts for missing service personnel. The position will develop and execute a collaborative research project that will increase the applied and scholarly impact of the DPAAs datasets, by leveraging the unique capabilities of tDAR (the Digital Archaeological Record; www.tdar.org). The postdoctoral researcher will be expected to work with the DPAA to create project deliverables and publish the results of this research in appropriate venues.

As currently conceived, the project has three focus areas. First, the Post-Doctoral Scholar will continue to develop computational models to conduct landscape-scale analyses across regions of interest by aggregating existing hard-copy data from DPAA reports, along with freely available spatial gridded environmental data. Using known incident details contained in existing reports, archaeological data, and a suite of environmental data, the project seeks to understand where other missing service personnel are likely, or not, to be recovered in the future. Second, the project will explore the use Natural Language Processing models, and other AI, to extract meaningful information from legacy documents for analysis. Finally, the project will explore ways to increase data interoperability across existing DPAA datasets.

The Center for Digital Antiquity (CDA) within the School of Human Evolution and Social Change at Arizona State University is a multi-institutional organization dedicated to ensuring the long-term preservation of irreplaceable archaeological data and to broadening access to these data. Our mission is to extend our knowledge of the human past and improve the management of our cultural heritage by permanently preserving digital archaeological data and supporting their discovery, access, and reuse. As part of fulfilling these goals, CDA oversees the use, development, and maintenance of the Digital Archaeological Record (tDAR), an international repository for the digital records of archaeological investigations, organizations, projects, and research. One of CDA's key objectives is to foster the use of tDAR and ensure its financial, technical, and professional sustainability. Use of tDAR has the potential to transform archaeological research by providing direct access to digital data from current and historic investigations along with powerful tools to analyze and reuse it.

Job duties will include:
- Organizing hard-copy reports for scanning at DPAA facilities
- Processing digital documents and metadata in tDAR
- Data mining using conventional or Natural Language Processing techniques
- Building datasets for use in Geographic Information Systems (GIS)
- Conducting analyses to interrogate case and conflict-related questions posed by DPAA
- Preparation of reports and manuscripts with collaborators
- Other duties as assigned

Minimum qualifications:
- a Ph.D. in anthropology or a related field by the time of appointment
- Demonstrated commitment to working with faculty, staff, students and communities to advance the principles of the ASU Charter

Desired qualifications:
- Knowledge of and experience with archaeological data and materials
- Experience in database manipulation,
- Demonstrated knowledge of Geographic Information Systems (GIS)
- Evidence of experience in Natural Language Processing,
- Strong record of collaborative research and outreach activities.

To apply, please submit application materials electronically to http://apply.interfolio.com/137156. Required materials include:
> 1) a cover letter outlining qualifications;
> 2) a 2-3 page statement outlining proposed research, as specified above
> 3) a current curriculum vitae, and
> 4) contact information for three references.
> General questions about this initiative should be directed to Dr. Christopher Nicholson (Christopher.M.Nicholson@asu.edu).

Initial deadline for complete applications is December 28, 2023; if not filled, review of complete applications will occur every two weeks thereafter until the search is closed.

This is an estimated 18-month position with a compensation package of $55,000 annual salary plus competitive benefits through Arizona State University including health insurance, paid vacation, sick leave, and holidays.

Background check is required for employment.

Arizona State University is a VEVRAA Federal Contractor and an Equal Opportunity/Affirmative Action Employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, disability, protected veteran status, or any other basis protected by law. (See https://www.asu.edu/aad/manuals/acd/acd401.html and https://www.asu.edu/titleIX/.)

In compliance with federal law, ASU prepares an annual report on campus security and fire safety programs and resources. ASU's Annual Security and Fire Safety Report is available online at https://www.asu.edu/police/PDFs/ASU-Clery-Report.pdf. You may request a hard copy of the report by contacting the ASU Police Department at 480-965-3456.