

The GeoVISTA Center ([www.geovista.psu.edu](http://www.geovista.psu.edu)) at The Pennsylvania State University is seeking applicants for a Postdoctoral Scholar position. The position will be a fixed-term appointment of 12 months with the potential for renewal. The successful applicant will join an interdisciplinary team that brings together perspectives from GIScience, information science, cognitive science, and computer science to achieve advances in geo-Big Data methods and their application in contexts that range from social and environmental science, through public health and education; to support for risk assessment, disaster management and humanitarian relief. Preference will be given to candidates with research interests linked to space-time dynamics, spatial language and text analytics, social data analytics, and/or choro-phronesis.

The position will involve participation in one or more ongoing GIScience research projects as well as participation in proposals for new projects. To meet existing project needs and to complement current faculty, staff, and graduate assistant research efforts, we are looking for an individual with substantive interests that complement those of current faculty. The ideal candidate will have expertise in at least two domains listed and the ability to interact with an interdisciplinary research team that, collectively, is focused on challenges within and across these domains.

- (Geo)Visualization/Visual Analytics: Integration of visual with statistical and computational methods for exploration of large, high-dimensional, space-time data sets; work with heterogeneous information sources (e.g., numerical data, text, images); software engineering to support visual analytics tool development (particularly for web-based applications).
- (Geo)Text Analytics: Named-entity recognition and geoparsing, place-time relevant text mining and topic modeling, geographical information retrieval.
- Network Science: Geo-social networks; place-relevant complexity science.
- Big Data and High Performance Computing: The use of high performance computing to support interactive interfaces for work with large volumes of heterogeneous and potentially streaming spatial data.
- Knowledge Construction and Management: Semantic search/mediation; spatio-temporal data representation; connecting knowledge repositories with analytical tools.
- User-Centered Design/Cognitive Systems Engineering: Usability engineering methods, human-computer interaction (HCI), and laboratory studies to understand cognitive work with visual information technologies.
- 3D Modeling & Virtual Reality: of geographic scale phenomenon, for applications in wayfinding, climate change, ecology, and data visualization.

Additional desired qualifications include: ability to lead and manage projects; software engineering expertise; strong written and oral communication skills; experience in application of basic research advances to relevant domains of science and practice; and ability/willingness to participate (as an instructor or advisor) in Penn State's online geospatial education programs.

The successful applicant must provide evidence of an ability to work productively in an interdisciplinary collaborative research setting. Expertise in geospatial information and

technology is desirable, but not essential. Ph.D. in hand at time of appointment is required for postdoctoral appointment.

Applicants should submit the following information (grouped as needed into no more than 7 files for upload): a brief cover letter indicating your interest in being considered; curriculum vitae / resume and contact information for 3-5 references (name, office address, and e-mail address); a one to two page statement of experience as it relates to the research domains listed above; and a maximum of five sample reprints/preprints (as PDFs).

Review of applications will begin March 11, 2016, but applications will be accepted until the position is filled. We encourage applications from individuals of diverse backgrounds. Questions about the position should be directed to Dr. Alan M. MacEachren, Director, GeoVISTA Center, Department of Geography, email: [maceachren@psu.edu](mailto:maceachren@psu.edu); phone: (814) 865-7491.??

Apply online at [psu.jobs/job/61997](http://psu.jobs/job/61997)

CAMPUS SECURITY CRIME STATISTICS: For more about safety at Penn State, and to review the Annual Security Report which contains information about crime statistics and other safety and security matters, please go to??[www.police.psu.edu/clery](http://www.police.psu.edu/clery), which will also provide you with detail on how to request a hard copy of the Annual Security Report.

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