ARIZONA STATE UNIVERSITY
An Equal Opportunity/Affirmative Action Employer

POSITION DESCRIPTION:
Postdoctoral Research Associates – Spatial Sciences
Job # 11889

Overview:
The School of Geographical Sciences and Urban Planning (SGSUP) at Arizona State University (ASU) seeks applications for three non-tenure-track positions at the rank of Postdoctoral Research Associate. The positions are available from as early as April 1, 2017 and preferably should be filled by Fall 2017. All positions are for one year although extensions may be possible dependent on funding and performance.

The Spatial Analysis Research Center (SPARC) is a newly formed GIScience and earth observing center within the School of Geographical Sciences and Urban Planning (SGSUP) at Arizona State University (ASU). SPARC's goals are to advance the science and technology of GIScience and earth observing and to lead the transdisciplinary application of spatial data science solutions for addressing novel and impactful research questions. The ASU Tempe campus has approximately 60,000 students and is located in the rapidly growing metropolitan Phoenix area, which provides a wide variety of recreational and cultural opportunities and is especially desirable for outdoor enthusiasts who enjoy biking, hiking, skiing, and other activities in the exquisite Arizona canyon lands and rugged terrain.

Job Description:
SPARC is seeking three Post-Doctoral Fellows that will contribute to at least one of the areas listed below. These positions present a unique opportunity to contribute to and expand upon the research thrusts of several ongoing and emerging projects while also helping to develop new collaborative research efforts within SPARC and ASU. The successful candidate will be expected to articulate a specific plan of research to build on existing research and take research in new directions. The candidate will also assume a leadership role in helping to develop integrative proposals and will also take responsibility for day-to-day operations of the lab.

Ongoing research areas of interest include:

- Wildlife Movement: Research will focus on the development and application of methods to quantify movement of wildlife telemetry data and relate movement to habitat using earth observing data. Study species may include bears, deer, and sea turtles.
- Spatial Data Analysis: Research will emphasize development of spatial models accounting for spatial heterogeneity and spatial dependence
- Mobility and Big Data: Research will demonstrate the strengths and weaknesses of fitness app data for understanding cyclist and pedestrian movement and informing planning decisions and transportation monitoring.
- Cyberinfrastructure and Big Data: Research will focus on developing new spatial-temporal data analytics and machine learning techniques to solve data- and computation- intensive geospatial problems, including large-scale climate analysis, terrain mapping and/or biomass prediction.
- Other area may include spatial modeling of movement data, machine learning, and remote sensing.

Essential Duties:
- Contribute to existing research projects and publications
- Assist in mentoring current graduate students in their research
- Collaborate with faculty to develop and submit research proposals
- Provide guest lectures as appropriate and consistent with your expertise for graduate and undergraduate courses.
- Take responsibility for the day-to-day operations of the SPARC lab

Minimum Qualifications:
- A Ph.D. in geography, statistics, computer science or a related field by time of appointment.
- Strong data analysis skills with software such as R, SPSS, Matlab, ArcGIS, etc.
- Demonstrated verbal and written communication skills (in English)
- Demonstrated research and publication record in the peer-reviewed literature within some aspect of the field of spatial research.

Desired Qualifications:
- Strong programming skills (e.g., C, Fortran, Python, scripting languages, etc.)
- Experience working within a unix/linux environment

To Apply:
To apply, please submit the following as a single PDF document: to sgsup.jobs@asu.edu with "SPARCPostDoc 11889" as the subject line text. The file name for your PDF should be of the form <surname>_<firstname>.pdf
- A Statement of Research Interests (not to exceed 2 double-spaced pages);
- A complete Curriculum Vitae including a list of publications and the names/email address/phone numbers of three references;

Further inquiries should be made to Prof. Stewart Fotheringham sfotheri@asu.edu (SPARC Director) or Prof. Trisalyn Nelson Trisalyn.nelson@asu.edu (SGSUP Director and Foundation Professor) The initial review of applications will begin March 13th, 2017; if not filled, applications will be reviewed every two weeks thereafter until the search is closed. A 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 be considered without regard to race, color, sex, religion, national origin, disability, protected veteran status, or any other basis protected by law.
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