Position: Postdoctoral Associate

Location: Mississippi State University main campus in Starkville, MS.

Unit: Geosystems Research Institute. At GRI we focus on remote sensing computational technologies, visualization techniques, agriculture and natural resource management and the transition of these into operational agency research, planning and decision-support programs.

Project Description: This project focuses on the utilization of high performance computing for addressing geospatially-based issues in agriculture (including wildlife utilization thereof). The postdoctoral associate will be part of a team of scientists working on individual and team research that falls under this broad umbrella. The role of the postdoctoral associate will be to assist with experimental design and data analysis related to these research efforts. As such, the postdoctoral associate is expected to have a strong background in spatial statistics to complement the subject matter experts they will collaborate with under this project.

Funding: Funding for this position is for 4 years. Funding is provided by the US Department of Agriculture.

Minimum Qualifications:

- Ph.D. in Statistics, Applied Mathematics, or other relevant discipline
- Excellent written and oral communication skills
- Ability to work collaboratively in a team environment

Relevant Skills:

- Ability to appropriately apply advanced geospatial analysis techniques such as cluster analysis, local and global measures of spatial association, geographically weighted regression, and interpolation approaches, such as kriging and inverse distance weighting (IDW)
- Advise collaborating scientists on proper experimental design and analysis protocols for individual and team research under the project

Essential Duties and Responsibilities:

- Support interdisciplinary teams to develop study questions that examine the geographic and temporal variations in plants and animals
- Identify statistical approaches to best examine research questions in collaboration with USDA Agricultural Research Services (ARS) scientists
- Develop methods and models for assessing relationships that increase the understanding of agriculture
- Participate in oral and written communications, as needed, to interface with the participating scientists and stakeholders to obtain clarity in requirements
- Dissemination knowledge in archival literature and at conferences and meetings
- Other duties as assigned
The ideal candidate for this job will (listed in order of importance):

- Have a strong background in spatial statistics
- Work well in a collaborative team environment
- Be motivated to publish peer-reviewed articles
- Desire to work with a range of datasets and diverse applications
- Have experience with geographic information systems (GIS)
- Have experience with Python coding

Application: Interested candidates should submit a cover letter, resume, and a copy of your transcript(s) via the following link. Any social security numbers included on the requested transcripts should be redacted prior to submitting online. [https://explore.msujobs.msstate.edu/cw/en-us/job/500273/postdoctoral-associate](https://explore.msujobs.msstate.edu/cw/en-us/job/500273/postdoctoral-associate)

Contact: If you have questions regarding this position, you can contact Dr. Joby Czarnecki with the Geosystems Research Institute at Joby.Czarnecki@msstate.edu. Please do NOT send your application materials to this email address as no applications can be accepted without using the MSU jobs system.