Postdoctoral Scholar Position

A postdoctoral scholar position is currently open within the Department of Geography and Environmental Studies at Texas State University in San Marcos, Texas. We are actively seeking a candidate with a Ph.D. in Geography/GIScience or a related field, demonstrating a strong interest in one or more of the following areas: geospatial data science, human mobility, climate change, disaster management and response, neighborhood dynamics, social media, health GIS, geovisualization, CyberGIS applications, and web-based GIS. Candidates are expected to have publications in high-impact journals. This position primarily involves research activities, constituting 90% of the role, such as data collection, analysis, software package development, grant proposal writing, and preparation of conference/journal papers. Additionally, there is a 10% commitment to teaching, including the instruction and guidance of undergraduate, master's, and/or Ph.D. students. These activities will be led by Dr. Su Yeon Han. The postdoctoral fellow will receive training and mentorship and will have the opportunity of working on one or more of the following ongoing research projects:

- Analysis of human mobility utilizing big data (e.g., Taxi, SafeGraph, and mobile phone data).
- Spatial accessibility in terms of smart cities and health-related research topics.
- Health GIS and HIV/AIDS studies.
- CyberGIS-Vis: Development of open-source software tools for interactive geospatial visualization and scalable visual analytics.
- Development of CyberGIS decision support tools to help address real-world problems in health and disaster research, including: (1) identifying vulnerable populations/neighborhoods, (2) exploring health disparities, (3) forecasting infectious diseases, and (4) studying human behavior and movement during disasters.
- Analysis of Twitter data related to climate change using machine learning and natural language processing (NLP).

Required skills and abilities:

- Ph.D. in Geography/GIScience, computer science, geography, information science, statistics, or a related field. ABDs will be considered, but a doctoral degree must be awarded by the starting date of the position.
- Python programming skills.
- Experience in handling big geospatial datasets.
- Experience in writing and preparing manuscripts for publication.
- Excellent scientific writing and strong oral communication skills.
- Experience with geographic information systems (GIS) and interactive web-GIS applications.
- Demonstrated ability to work effectively, collaboratively, and collegially.

Preferred qualifications:

- A good understanding of advanced spatial & statistical methods.
- Understanding of GeoAI and machine learning methods.

- Development of web-based GIS and applications using Javascript Libraries such as Leaflet, Plotly, and D3.
- Understanding and knowledge of the fields of health geography or disaster research.
- Natural language processing (NLP) and machine learning for text analysis (Twitter messages). Text Analytics to process large volumes of unstructured text.
- Experience in writing grant proposals.

The initial appointment is for one year and is subject to renewal based on performance and funding availability. The Salary is competitive and commensurate with experience and relevant research.

Start Date: June 15th, 2024, or soon thereafter
Deadline for Application Submission: May 5th, 2024

Application Process: To express interest in the position, contact Dr. Su Yeon Han (su.han@txstate.edu). Include (1) a cover letter, (2) a detailed curriculum vitae; (3) a brief statement of research interest; (4) a sample of relevant publications, and (5) the names and contact details of three references. The application deadline is May 5th, 2024. However, we will commence the review process upon receiving applications, and a qualified candidate may be hired before the deadline. Therefore, if you are interested, we strongly encourage you to apply as soon as possible.

Texas State University will not discriminate against any person in employment or exclude any person from participating in or receiving the benefits of any of its activities or programs on any basis prohibited by law, including race, color, age, national origin, religion, sex, disability, veterans' status, sexual orientation, gender identity, or gender expression. Texas State is committed to increasing the number of women and minorities in faculty and senior administrative positions. Texas State is a member of The Texas State University System.