

## PhD Graduate Assistantships in GIScience in 2024 Spring/Fall

Dr. Yi Qiang at University of South Florida is seeking **two PhD graduate assistants** interested in GIScience and spatial data science to begin in the **spring or fall semester in 2024**. The assistants will work in one of the following topics:

(1) **Flood Exposure and Vulnerability Mapping:** The RA will play a pivotal role in integrating diverse sources of geospatial data, including flood models, census data, social media data, and VGI, to assess flood exposure, socio-economic vulnerability, and community resilience across multiple scales. The RA is expected to leverage statistical methods, machine learning and AI techniques and integrate diverse geospatial data sources for the assessments. The project aims to design and develop a scalable Community Resilience Information System (CRIS-HAZARD) for high-fidelity flood models and vulnerability/resilience assessments.

(2) **Human Dynamics in Natural Hazards and Climate Change:** The RA will use various human mobility and migration datasets to quantify the influence of natural hazards and climate change on both short-term and long-term human migration and socio-economic transformations. The developed datasets, methods, and analytical tools will be implemented in the Human Dynamics and Resilience (HDR) cyberinfrastructure to advance human dynamics and resilience research.

### Minimum Qualification:

- Master's degree in geography, GIS, urban planning, environmental science, computer science, or a related field.
- Strong background in GIS, geovisualization, spatial analysis and modeling.

### Desired Qualification:

- Knowledge in data science programming (e.g., Python or R)
- Knowledge in statistical modeling, machine learning, and artificial intelligence
- Excellent written and verbal communication skills in English.

### What We Offer

The selected candidates will be offered a four-year graduate assistantship with a competitive package including monthly stipend, tuition waiver, health insurance, computer and travel fund. The PhD program is in the STEM category that grants a 3-year Optional Practical Training (OPT). Required and desired qualifications of the positions are as follows:

### How to Apply

A complete application for graduate programs ([PhD in Geography, Environmental Science & Policy](#)) at the School of Geosciences is required for full consideration. The application deadline for the 2024 spring enrollment is **October 15, 2023** and for the 2024 fall enrollment is **January 1, 2024**. GRE is not required for the application.

Interested applicants are encouraged to contact Dr. Yi Qiang ([qiangy@usf.edu](mailto:qiangy@usf.edu)) before submitting the formal application.

### School of Geosciences