FIU Geographic Information Systems (GIS) Center
FLORIDA INTERNATIONAL UNIVERSITY

FIU Institute of Environment
FIU Libraries

Open PhD position at Florida International University in Miami, FL

Environmental Data Science – Geographic Information Science – Sea Level Rise

The GIS Center, Institute of Environment (IoE) and the Department of Earth & Environment (E&E) at Florida International University are seeking a **Graduate Research Assistant** for an EPA-funded project to enhance the **Future Shorelines** geospatial decision support tool. This tool integrates high-resolution topographic data with NOAA sea level rise scenarios to aid planning for nature-based solutions under future climate conditions. The selected candidate will advance the tool using **innovative data science and GIS techniques to address coastal resilience and environmental justice challenges**. This assistantship provides the opportunity to work on an interdisciplinary project with real-world applications in climate adaptation and sustainable coastal management. For more details, visit the project website.

About the role

This role combines environmental science, GIS and data science to explore climate change impacts through data-driven research. The candidate will enhance geospatial tools, leveraging high-resolution spatial data, automation, spatial analysis and interactive visualization. Responsibilities include programming in environmental domains (e.g. elevation and inundation modeling), applying spatial analysis and data processing to address challenges like sea level rise and environmental justice. Working closely with Dr. Levente Juhász (GIS Center) Dr. Paulo Olivas (E&E) and Dr. Randall Parkinson (IoE), the candidate will contribute to actionable solutions for sustainable coastal management while also working towards the PhD degree in Earth Systems Science. The research will be carried out at FIU's main campus in Miami, FL.

Required qualifications

- MS in GIS(cience), geography, hydrology, environmental/climate science or similar
- Strong skills in at least one modern programming language, particularly Python or R
- Experience with Digital Elevation Models and modeling techniques
- Experience or interest in geospatial analysis, statistics, data science and modeling

Preferred qualifications

- Familiarity with open-source GIS tools, web-based application development and modern geospatial techniques and technologies (e.g. vector tiles, cloud-native geospatial, GeoAI)
- Knowledge of or willingness to learn about coastal systems and sea level rise

The successful applicant will **receive a tuition waiver, annual stipend, and health insurance**. Candidates should demonstrate a strong commitment to research, excellent work ethic, and ability to work both independently and collaboratively. If you are interested, please send a CV, a brief description of your motivation to apply for this position to Dr. Levente Juhász (ljuhasz@fiu.edu). **Final admission depends on satisfying all FIU Graduate Admission requirements**. The position is expected to start in the Fall 2025 semester (Aug 25). The official Fall'25 application deadline is February 1, but applicants are strongly encouraged to apply as soon as possible to avoid administrative delays.

About FIU

Florida International University is a top public university that drives real talent and innovation in Miami and globally. Very high research (R1) activity and high social mobility come together at FIU to uplift and accelerate learner success in a global city by focusing in the areas of environment, health, innovation, and justice. Today, FIU has two campuses and multiple centers. FIU serves a diverse student body of more than 56,000 and 290,000 Panther alumni. U.S. News and World Report places dozens of FIU programs among the best in the nation, including international business at No. 2. Washington Monthly Magazine ranks FIU among the top 20 public universities contributing to the public good.