GATOR LAB

GEOSPATIAL ANALYTICS, TECHNOLOGY AND OPEN RESEARCH

JOB OPPORTUNITY • POSTDOCTORAL ASSOCIATE • DGGS

UF IFAS UNIVERSITY of FLORIDA

FORT LAUDERDALE RESEARCH & EDUCATION CENTER

About the Position

The newly established GATOR Lab at the University of Florida is seeking a full-time **Postdoctoral Associate** to conduct foundational or computational research on **Discrete Global Grid Systems (DGGS)**. We offer high autonomy for an ambitious researcher to define and lead a project at the intersection of modern computing and geospatial science. Initial appointment will be for 1 year, renewable based on performance and funding.

Research Directions

We welcome candidates with either a theoretical/methodological focus or a computational/systems engineering background. You may propose work along either track or bridge both:

Track A: Theoretical & Methodological Foundations

Investigating spatial aggregation effects, geometric and areal distortion, aperture and nesting properties across tessellations (hexagonal, pentagonal, triangular), spatial statistics on discrete grids, or cross-resolution topology.

Track B: Computational Systems & Open-Source Tooling

Developing DGGS benchmarks, multi-grid interoperability, scalable indexing algorithms, or native integration with cloud-native columnar ecosystems (e.g., GeoParquet, DuckDB, Arrow, STAC) and GeoAI workflows.

Our Mindset

We value intellectual curiosity, open science, and a critical mindset. We look for researchers who don't just apply spatial tools as black boxes, but interrogate how and why they work. You will thrive here if you are a self-starter who values rigor and impact over volume.

What You Will Have Access To

- **Compute Infrastructure:** Dedicated high-performance in-lab GPU workstations plus direct access to **HiPerGator**, one of the most powerful AI supercomputers in U.S. academia.
- **Career Launchpad:** Direct mentorship, opportunities to co-mentor PhD students, and full support for publishing high-impact papers and open-source software. Travel to conferences will also be supported.

How to Apply

Applications are reviewed on an ongoing basis. Email Dr. Juhász at **levente.juhasz@ufl.edu** with:

1. **CV** and links to your GitHub / software portfolio or Google Scholar.
2. **A 1-Page Research Pitch:** Skip the generic cover letter, **do not write a long proposal**, but send a concise (**1-page max**) pitch outlining a specific DGGS problem or general direction you want to work on in the next year(s), why it matters, and expected outputs.
3. Name + contact of at least 2 references familiar with you
4. DGGS-POSTDOC as subject line prefix.

Appointment Terms

- **Duration:** 1 year initial, extendable based on satisfactory performance and funding availability.
- **Start Date:** As soon as feasible.
- **Salary:** $60,000 - $70,000

Location

Based at the **Fort Lauderdale Research and Education Center** in the Miami metropolitan area.

Requirements

Ph.D. in Geomatics, GIScience, Computer Science, Geography, or a related quantitative discipline.

The University of Florida is a Top 10 U.S. public university and an Equal Opportunity Institution. Final hiring is contingent upon formal application via UF Careers and background/immigration clearance.

Join us at the University of Florida to build the future of Geospatial Data Science.