
Geospatial Analyst (Term Position)

Job Description

The Jones Center at Ichauway is recruiting a full-time Geospatial Analyst in research and development to improve forest conservation efforts in the southeastern US region. The role is preferably in-person, but remote work can be negotiated for candidates based in the southeastern region. This role integrates cutting-edge remote sensing technologies, advanced data science techniques, and field experiments, to enhance conservation outcomes in collaboration with conservation agencies and research partners. The incumbent will work collaboratively with Dr. Jeffery Cannon, staff of the Landscape Ecology Lab, other research partners, and conservation agencies. This is a term-limited position funded for three years, with the possibility of extension based on performance and funding availability.

Longleaf pine forests are considered a critically endangered ecosystem that have been reduced to a fraction of their historic range. Conservation efforts are planned for over 4 million acres of southeastern land to restore this important ecosystem that is considered a biodiversity hotspot. Spatial technologies such as GIS, satellite imagery, and LiDAR offer ways to increase the pace, scale, and quality of restoration by supporting broad-scale planning, monitoring, and analysis, and improving restoration practices.

Essential Duties and Responsibilities

The incumbent will conduct research and analysis to support improved research outcomes in the region. Specifically, the selected candidate will:

- (1) Lead development of research and monitoring efforts in southeastern forests using cutting-edge approaches such as aerial LiDAR, terrestrial LiDAR, and UAV photogrammetry;
- (2) Co-develop GIS and remote sensing workflows with collaborators to be used by partnering agencies that process existing spatial data to monitoring conservation projects, using R Shiny, Google Earth Engine, Python, or similar tools;
- (3) Collaborate with a distributed team using flexible work arrangements, as negotiated;
- (4) Conduct independent ecological research that aligns with lab goals to advance technological applications in conservation;
- (5) Communicate research findings through technical reports, peer-reviewed publications, and presentations to collaborators, stakeholders, and at scientific conferences.

Qualifications

Required qualifications

We encourage applicants from a variety of ecology, conservation, or quantitative backgrounds to apply. An M.S. degree in forestry, geography, ecology, computer science, environmental engineering, or related field with significant experience in quantitative or spatial data science OR a B.S. degree in computer science or environmental engineering with significant experience in conservation, forestry, or natural resources management is required.

We seek candidates who are motivated, adaptable, and capable of working both collaboratively and independently. Demonstrated proficiency in at least two of the following areas is expected: statistical analysis, vegetation surveys, silviculture, conservation easements, remote sensing, geospatial analysis, or scientific writing and communication. Valid state driver's license required.

Preferred qualifications

Experience processing large remote sensing, inventory, and geospatial datasets using R, Google Earth Engine, C++, and/or Python is preferred. The candidate should have experience designing and implementing field and laboratory experiments, as evidenced by publications in peer-reviewed outlets and have familiarity with conventions for analyses and methodologies in remote sensing. Candidates with knowledge of southeastern ecosystems, conservation easements, and related policy will bring added value to the team.

Term of Employment

Salary

\$45,000 – \$55,000 commensurate with experience. The Jones Center offers competitive benefits, including health insurance, retirement contributions, professional development opportunities, and support for conference attendance. This position is a full-time, term-limited role funded for three years, with the possibility of extension contingent on performance and funding availability.

Work Location

This term-limited position is based at the Jones Center in Newton, GA (3988 Jones Center Dr., Newton, GA, 39870). Remote work arrangements may be negotiated for candidates based in the southeastern region who can travel to work locations as needed.

Working Conditions

This role offers a balance of analytical work and hands-on fieldwork in diverse ecosystems. Fieldwork may involve occasional long hours under varied weather conditions. The role may include the flexibility to perform analytical and computational tasks remotely, subject to agreement with the supervisor. Occasional travel to regional or national conferences for up to one week may be required.

Application Instructions

- Applications should include (1) a letter of interest including education and experience, (2) a current CV, and (3) a writing or analysis sample (encouraged, but optional).
- Candidates interested in remote work should indicate their availability and expectations in the cover letter.
- Email applications to jobs@jonesctr.org AND Dr. Jeffery Cannon (jeffery.cannon@jonesctr.org) subject "Landscape Ecology Geospatial Analyst Application".

Contact: Jeffery B Cannon, *Landscape Ecologist*, jeffery.cannon@jonesctr.org 229-734-4706

Deadline: February 21, 2025. Applications will be reviewed upon receipt until the position is filled.

Start date: March 2025 is preferred, but negotiable