

Job Announcement – Part-time Data Systems Engineer Forest Ecosystem Monitoring Cooperative

Job Title

Data Systems Engineer

Description

The Forest Ecosystem Monitoring Cooperative ([FEMC](#)) is a regional cooperative funded through the USFS that aims to improve the understanding of the physical, chemical, and biological components of forested ecosystems. FEMC's primary means of doing this are through a long-term monitoring program, an extensive data archive, and the creation of products that make data easier to access and interpret.

The Data Systems Engineer will assist with updating and maintaining [FEMC's data-driven tools](#) and products, including our Vermont Forest Indicators Dashboard, Northeast Forest Inventory Network (NEFIN), and our Forest Health Atlas. Tasks will include locating new data, building data pipelines for automated data updates, and organizing existing datasets. We seek a candidate who has ample training in computer programming; this position would be best suited for a graduate student in computer science or complex systems, or an advanced computer science undergraduate student who is graduating early or seeking a capstone or internship experience in their final semester. Though familiarity with ecological data would be a benefit, we do not require it.

Job Duties/Responsibilities

- Updating data available on existing FEMC data-driven tools (Vermont Forest Indicators Dashboard, Northeast Forest Inventory Network, Forest Health Atlas)
- Improving organization of existing datasets (FEMC's Forest Health Monitoring data, FEMC's meteorological station data, and more)
- Supporting the development and release of Forest Indicators Dashboards for New York and New Hampshire

Job Requirements

- Familiarity with ETL systems (Extract – Transform – Load)
- Fluency in Python or R; both preferred
- Experience using Git for version tracking and management of production environments
- Experience using GIS systems, particularly AGOL and GeoPandas, ArcPy (or R equivalent), to process vector and raster data
- Strong communication skills
- Ability to work well independently and with others

Desired Qualifications

- Familiarity with PHP
- Proficient in SQL and MySQL databases
- Experience with CLI triggered processing
- Familiarity with concepts of forest ecology, geography, environmental sciences or related discipline

Pay and Schedule

Compensation for this position is set at the standard UVM rates for students (\$21.20/hour for a graduate student; \$17.00/hour for an undergraduate). Compensation for recent graduates will be commensurate with experience.

This position has schedule flexibility and requires 10-20 hours per week. The position is scheduled to begin in January 2025, with an option to renew in the summer depending on interest and available work.

To Apply

Send your current resume including a list of your qualifications and skills that align with the job requirements to Soren Donisvitch (soren.donisvitch@uvm.edu) and Alison Adams (alison.adams@uvm.edu) by December 9, 2024. Qualified candidates will be interviewed via Teams the following week.