

FiniteCarbon

JOB DESCRIPTION **APPLIED REMOTE SENSING SCIENTIST**

About Us

Fueled by a fundamental belief that forests are critical to mitigating climate change, Finite Carbon incentivizes the protection, restoration, and sustainable management of forests by connecting landowners to the global carbon market.

With a focus on scale, we have delivered more than \$800 million to landowners who have made long-term commitments to sustainable forest management on more than 3 million acres since 2009. We aim to deliver a further \$1 billion to landowners by 2030. Our recently announced web-based platform, CORE Carbon, leverages satellite data and machine learning to democratize the carbon market and empower small landowners, non-profits, and communities across the globe to receive payments for implementing forest practices that store carbon.

In November 2020, Finite Carbon became a bp Launchpad portfolio company, which gives us access to significant resources to support our ambitious growth plans.

About the Role

We are looking for a remote sensing scientist who is passionate about helping to fight climate change. This position will work on a small team of remote sensing experts to design and build advanced forest analytics that leverage remote sensing and field inventory datasets. You will partner with a diverse set of internal stakeholders to develop tools to incentivize forest conservation and biological carbon sequestration. If you are excited to work with enormous datasets in cloud environments to help answer some of the most pressing questions Finite has, this is the role for you!

What You'll Do

- Collaborate with team members to build models and data pipelines at scale with a focus on Canadian forests.
- Design and test optimal modeling frameworks to generate high accuracy estimates of forest carbon stocks at multiple geographical scales and across multiple regions.
- Research and collaborate on a wide range of remote sensing datasets, technological solutions, and modeling approaches.
- Implement cutting-edge modeling approaches to build large scale forest change detection and stock estimates to expand access to forest carbon offset revenue streams.
- Design and evaluate forest inventories and sampling protocols for estimation of carbon and other forest inventory variables.

What You'll Bring

- Degree in a scientific or quantitative field (e.g., remote sensing, imaging science, geography, geoscience, computer vision, computer science, physics, mathematics).
- 3+ years of experience building models to solve complex problems with messy datasets.
- 5+ years of experience working with either Python or R (with experience working with machine learning and remote sensing libraries).
- Familiarity with the CFS-CBM3 carbon model and the Canadian National Forest Inventory system.
- Strong problem-solving skills and experience applying creative approaches to difficult problems.
- Experience working with remote sensing, LiDAR, image, or geospatial data specific to Canadian ecosystems – e.g., IceSat2, Landsat, Sentinel (I, II), provincial airborne LiDAR, hyperspectral, and radar.
- Strong written and oral communication skills and the ability to work remotely and collaborate with a remote team.
- A passion to work on mitigating climate change - one of the world's most pressing problems.

Nice to Have Skills or Experience

- Familiarity with forest sampling designs and forest management.
- Experience with geospatial and remote sensing analyses using open-source software (e.g. – common python geospatial libraries such as gdal, rasterio, xarray, shapely, Fiona, and dask).
- Familiarity with forest carbon offsets.
- Experience working in cloud computing environments and creating modular and reusable code.
- Experience working with git and collaborating on code development.

Benefits and Perks

-  Competitive Pay
-  100% monthly medical premium paid for you and your dependents
- Dental, Life insurance, Vision, Short-term, & Long-term Disability
-  Paid Time Off
- Flexible schedule
-  WFH set-up budget

-  Annual in-person company meeting

Please note: Location is flexible within Canada. This is a fully remote role.

Finite Carbon is an equal opportunity employer. At Finite Carbon, we are committed to providing an environment of mutual respect where equal employment opportunities are available to all applicants and teammates without regard to race, color, religion, sex, national origin, age, marital status, military and veteran status, and any other characteristic protected by applicable law. Finite Carbon believes that diversity and inclusion among our teammates is critical to our success.