Remote Sensing/Emission Scientist

At C-CORE, we are committed to investing in people and creating a dynamic and rewarding employment experience. We are seeking a **Remote Sensing/Emission Scientist** to join our Earth Observation team.

About C-CORE

C-CORE conducts R&D and provides research-based advisory services, delivering innovative engineering and technology solutions to national and international clients. Over the past 50 years, we have built a world-class team of over 70 dedicated professionals with a reputation for excellence in: Remote Sensing and Oceans & Energy. We are looking for exceptional individuals to join our team and contribute to our continued success and solve challenging problems for industry and the environment for sustainable development.

Position Overview

As a **Remote Sensing/Emission Scientist** at C-CORE, you will play a key role in advancing our capabilities in remote sensing and GHG emissions research and development. You will work with advanced satellite technologies and methodologies to provide innovative solutions to our clients. This position offers the opportunity to work in either our St. John's, NL, or Ottawa, ON office, and to be part of a leading-edge team dedicated to excellence in Earth Observation (EO).

Key Responsibilities

- Collaborate with a multi-disciplinary team to design and develop EO solutions.
- Integrate remote sensing data from various sources and sensors (i.e., both freely available and commercial satellites) for research and operational purposes.
- Develop and apply methods for GHG detection and quantification using both physical-based and AI-based models from satellite observations.
- Conduct case studies and emission inversions for various regions and sources, focusing on super-emitters and urban hotspots.
- Develop EO algorithms for other environmental and commercial applications.
- Apply data science and machine learning techniques to enhance remote sensing data products and analysis.
- Design data processing pipelines for C-CORE geospatial services.
- Contribute to reports and scientific papers and present findings and results to clients

Minimum Qualifications

- Master's degree or above in Atmospheric Sciences, Environmental Sciences, and Computer Science or a related discipline, with an emphasis on Remote Sensing and Machine Learning.
- 2+ years of working experience in Canada with satellite GHG emission monitoring is preferred.
- Experience with the interpretation of atmospheric (e.g. satellite, aircraft, …) observations using transport models.
- Knowledge or experience with research and development on atmospheric methane/CO2 and flux inversions is considered an asset.
- Proficiency in remote sensing data processing and analysis techniques.
- Familiarity with Hyperspectral, LiDAR, Synthetic Aperture Radar, and InSAR.
- Strong programming skills, particularly in Python.
- Excellent written and oral English communication skills.
- Demonstrated experience with statistical analysis, machine learning, and deep learning.
- Strong analytical and problem-solving skills, with the ability to work collaboratively in a cross-functional team.
- Must be a Canadian resident with a valid work authorization.

Salary & Benefits

C-CORE offers competitive salaries and benefits, including attractive vacation entitlements and comprehensive medical and dental plans. We are committed to professional development, higher education, and personal growth.

How to Apply

Please forward your résumé electronically to: careers@c-core.ca, stating "Remote Sensing/Emission Scientist" in the subject line.

C-CORE thanks all applicants; however, only those selected for an interview will be contacted.