

Job Posting:170912 - Position: F25 Software Development for Remote Sensing Data Processing 170912

Co-op Work Term Posted: 2025 - Fall
App Deadline 06/30/2025 09:00 AM
Application Method: Through UBC Science Co-op
Posting Goes Live: 06/23/2025 10:20 AM
Job Posting Status: Approved

ORGANIZATION INFORMATION

Organization NRCan - Geological Survey of Canada
Country Canada

JOB POSTING INFORMATION

Placement Term 2025 - Fall
** Job Title ** F25 Software Development for Remote Sensing Data Processing 170912
Position Type Co-op Position
Job Location Sidney, BC
Country Canada
Duration 4 or 8 months
Salary Currency CAD
Salary 17.75 per hour for 0 Major List

Job Description

Co-op Opportunity - Software Development for Remote Sensing Applications

Location: Pacific Geoscience Centre, Natural Resources Canada, Sidney, BC

Start Date: Fall 2025 Term (with possible extension)

Natural Resources Canada (NRCan) - Geological Survey of Canada (GSC) is seeking a motivated co-op student (2nd year or above) in Engineering or Sciences with strong programming and scientific computing skills. This opportunity is ideal for students interested in applying their skills to real-world research and sustainability challenges.

Position Summary

You will join the Geodesy group at the Pacific Geoscience Centre in Sidney, BC, as part of a national NRCan research initiative supporting Canada's transition to sustainable energy. The project involves developing and automating software tools for satellite remote sensing data processing, specifically for analyzing GNSS, SAR data from Carbon Capture, Utilization, and Storage (CCUS) monitoring sites.

You will contribute to designing and implementing tools that automate satellite data acquisition, quality control, data processing and visualization. This position offers a chance to work on cutting-edge applications used by the scientific research community, with potential for extension into a second co-op term depending on performance.

Key Responsibilities

- Work with geoscientists and graduate students to understand project goals and define software specifications.
- Design and develop tools (primarily in Python and shell scripting) to automate the processing and visualization of remote sensing data.
- Implement data quality control workflows and interactive visualizations via web interfaces or graphic tools.
- Conduct software testing, resolve bugs, and refine tool performance.
- Document code, workflows, and technical specifications for long-term use and reproducibility.

Job Requirements

Required Skills

- Proficiency in Python and/or shell scripting.
- Experience with Unix/Linux environments.
- Exposure to scientific computing, including use of high-performance computing (HPC) or parallelized workflows.

Assets (Not Required but an Advantage)

- Web application or interface development experience.
- Familiarity with FORTRAN and/or Perl.
- Interest in geospatial or remote sensing applications.
- Strong communication and documentation skills.
- Ability to work independently and collaboratively.
- Enthusiastic and quick to learn new technical tools.

Additional Details

- Compensation is based on the Federal Government student hiring rate and is commensurate with experience.
- Preference will be given to Canadian citizens or permanent residents, but strong international candidates with valid student work permits will also be considered.
- The GSC values diversity and is committed to fostering an inclusive and supportive research environment.

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through UBC Science Co-op

Cover Letter Required? No