Job Posting:167845 - Position: S25 Verification and Validation Engineer (Co-op) 167845

Co-op Work Term Posted:	2025 - Summer
App Deadline	03/20/2025 09:00 AM
Application Method:	Through UBC Science Co-op
Posting Goes Live:	03/11/2025 03:50 PM
Job Posting Status:	Approved

ORGANIZATION INFORMATION

Organization	Redlen Technologies
Address Line 1	123-1763 Sean Heights Drive
City	Saanichton
Postal Code / Zip Code	V8M 0A5
Province / State	British Columbia
Country	Canada

JOB POSTING INFORMATION

Placement Term	2025 - Summer
<b> Job Title <b>	S25 Verification and Validation Engineer (Co-op) 167845
Position Type	Co-op Position
Job Location	Saanichton, BC
Country	Canada
Duration	8 months
Salary Currency	CAD
Salary	4020.0 per hour for 0 Major List

Job Description

About the Company

Redlen Technologies is an innovator in the design and production of solid-state radiation detectors & detector module assemblies. Our proprietary semiconductor production process for Cadmium Zinc Telluride (CZT) materials enables a new generation of higher resolution all-digital imaging equipment for medical and security applications.

Located in Victoria, B.C, Canada, Redlen is a rapidly growing supplier of CZT semiconductor radiation detector solutions. Currently, at over 200 employees and with international demand growing for our industry-leading products, Redlen offers a fantastic opportunity for those interested in making a difference in a fast-paced, high-growth environment. We take pride in fostering a work environment where Science, Technology, Engineering, and Math (STEM) professionals thrive. As an equal opportunity employer we demonstrate that diversity drives innovation, and we are passionate about building a future where every employee contributes to our mission-driven success. Redlen's teams, mirroring the multifaceted diversity of Canadian society, exemplify our commitment to leveraging a wide range of ideas and backgrounds as a driving force for innovation, business excellence, and pioneering advancements in STEM. Our Verification & Validation (V&V) team plays a critical role in ensuring the performance and reliability of these cutting-edge detectors.

The Role: Verification and Validation Engineer (Co-op)

We are looking for a highly motivated engineering co-op student for an 8-month term as a V&V Co-op Engineer. This role will support the continuous verification of our custom test software and contribute to the development of software test automation tools to improve efficiency.

This position offers hands-on experience in software verification, test execution, and automation development within a mixed

hardware/software environment. The successful candidate will assist in developing and executing feature verification tests for new software releases, analyzing test results, and identifying opportunities for automation. This role plays a key part in advancing test automation efforts, improving the efficiency and reliability of Redlen's software testing processes.
This role is based at Redlen's office in Saanichton, BC near Victoria.

Term deliverables:

• Execution of regression testing and bug finding for software releases.
•Development of Python scripts for automation of test processes.
•Documentation of test procedures and automation efforts.

Learning outcomes:

The student will gain some or all the following skills:

1. Hands-on experience with software verification in a manufacturing/R&D environment.
2. Developing and debugging Python scripts for automated test execution.
3. Experience with the software verification process in a highly technical and highly regulated industry.

Key responsibilities include:

Complete several short-term projects that could include the following activities:
• Test Execution & Analysis:
• Develop and execute test cases to verify that detector test software releases meet functional and performance requirements.
•Perform hands-on regression testing with a variety of different PCCT products.
•Analyze test results, compare expected vs. unexpected changes, and document findings.
•Collaboration & Quality Improvements:
• Work closely with engineers to report bugs, investigate test failures, and improve overall test software quality.
•Test Automation & Efficiency Improvements:
• Identify software testing tasks that can be automated and propose solutions.
•Develop and implement scripts to automate regression testing data analysis.
•Explore methods to automate test scheduling and streamline data analysis workflows.
•Document automation efforts to support knowledge transfer and future development.

Job Requirements

Experience preferred:

• Exposure to hardware-software interaction.
•Experience with Python data analysis tools (e.g. NumPy, Matplotlib).
•Familiarity with version control systems (preferably Git).
•Experience with software test automation or scripting.
•Basic knowledge of automated testing concepts like unit testing, regression testing and integration testing (experience with test frameworks is a plus but not required).
•Experience working in an Agile development environment.

Relevant skills of interest:

• Strong troubleshooting skills and attention to detail.
•Interest in automation and improving efficiency.
•Effective communication and documentation abilities.
•Ability to work collaboratively in a technical team environment.

Education:

• Working towards a degree in Electrical Engineering, Computer Engineering, Software Engineering, or related field.
•Completion of at least the 3rd year of the program is an asset but not required.
•Previous co-op experience is an asset but not required.

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through UBC Science Co-op
Cover Letter Required? Optional