Job Posting:172936 - Position: W26 Software Developer - C++ (Co-op) 172936

Co-op Work Term Posted:	2026 - Winter
App Deadline	09/16/2025 09:00 AM
Application Method:	Through UBC Science Co-op
Posting Goes Live:	09/09/2025 02:21 PM
Job Posting Status:	Approved

ORGANIZATION INFORMATION

Organization	Apera AI Inc.
Address Line 1	Ste. 501- 134 Abbott St.
City	Vancouver
Postal Code / Zip Code	V6B 2K4
Province / State	BC
Country	Canada

JOB POSTING INFORMATION

Placement Term	2026 - Winter
<b> Job Title <b>	W26 Software Developer - C++ (Co-op) 172936
Position Type	Co-op Position
Job Location	Vancouver, BC
Country	Canada
Duration	8 months
Salary Currency	CAD
Salary	Salary Not Available, 40 Major List
Salary Range $	$3600 to 3800 Monthly

Job Description

Position: Software Developer - C++ & Robotics (Co-op)
Company: Apera AI
Location: Vancouver, BC (On-Site or Hybrid)
Employment Type: Full-time Co-op (Temporary)

Role Overview

Apera AI is seeking a **Software Developer (Co-op)** with strong C++ skills and an interest in robotics to join our **Apera Vue** engineering team. You'll contribute to the development of real-time machine vision applications that power robotic systems across manufacturing and automation environments.

In this role, you'll build features in C++, support image processing and robotics integration, and contribute to testing efforts in both simulated and physical lab environments. Your work will improve the performance, reliability, and scalability of a system used on real factory floors.

Employee Value Proposition (EVP)

Purpose

You'll contribute to the core of our 4D Vision Technology, helping robots perceive and act in complex, real-world environments. Your code will directly impact robotic accuracy, speed, and adaptability.

Growth

You'll deepen your understanding of robotics, computer vision, and modern C++ development. You'll gain experience working in a professional R&D environment with exposure to production code, lab hardware, and team-based workflows.

Motivators

You'll collaborate with engineers solving high-impact technical challenges. You'll take on meaningful tasks that go beyond academic exercises, seeing your code influence how robots make decisions in real time.

Major Objectives

1. **Develop and Ship Core C++ Features for Apera Vue**
   Within the first 8-10 weeks, contribute a discrete feature or performance improvement to the Apera Vue application. You'll implement this in modern C++, test in the vision lab, and validate it under simulated robot conditions.
   [Tech: C++, Qt, OpenCV]
2. **Support Robotic Integration and Image Processing**
   Assist in testing and debugging real-world vision system behavior with robotic systems in the lab. Identify edge cases and performance issues. Suggest and test code-level improvements.
   [Tech: Linear algebra, multithreading, image pipelines]
3. **Improve Code Quality through Testing and Review**
   Participate in unit testing, test coverage expansion, and refactoring. Contribute to automated testing infrastructure to ensure robustness as the product scales.
   [Tools: CMake, Git, GTest, internal CI tools]

Critical Subtasks

• Participate in daily standups, planning, and code review sessions with experienced engineers.
•Implement C++ modules that interact with vision data, robot pose data, or internal image pipelines.
•Run and validate your code in a live robotic lab environment.
•Write tests and help investigate edge cases or bugs in production builds.
•Contribute to documentation and developer notes for the next co-op or new team members.
•Learn from performance profiling tools to understand how to optimize for speed and memory.

Culture and Situation Fit

At Apera AI, we blend scientific exploration with product execution. Our teams move quickly and iterate often, balancing R&D depth with industry-level engineering. You'll succeed here if:

• You enjoy learning by building and testing in the real world.
•You're curious about how software meets robotics, perception, and physical action.
•You value clean, well-documented code and thoughtful collaboration.

Job Requirements

Required Qualifications

• Strong knowledge of **C++**, including object-oriented design and memory management.
•Solid foundation in **linear algebra**, vectors, and 3D transforms.
•Experience with version control (e.g., Git).
•Experience with software projects through coursework, personal work, or prior co-op/internships.

Bonus Experience (Not Required)

• Experience in Linux development environments.
•Exposure to computer vision or robotics libraries (OpenCV, ROS, PCL).
•Knowledge of multithreading or networking in C++.
•Familiarity with Python for scripting and automation

Citizenship Requirement	N/A
Position Start Date	January 05, 2026 12:00 AM
Position End Date	August 28, 2026 12:00 AM

APPLICATION INFORMATION

Application Procedure	Through UBC Science Co-op
Cover Letter Required?	Yes
Address Cover Letter to	Hiring Manager