

## **Job Posting:172621 - Position: W26 Software Engineering Co-op Student (including embedded software) 172621**

<b>Co-op Work Term Posted:</b>	2026 - Winter
<b>App Deadline</b>	09/11/2025 09:00 AM
<b>Application Method:</b>	Through UBC Science Co-op
<b>Posting Goes Live:</b>	09/03/2025 04:55 PM
<b>Job Posting Status:</b>	Approved

### **ORGANIZATION INFORMATION**

<b>Organization</b>	Ikomed Technologies Inc.
<b>Address Line 1</b>	201 - 1375 McLean Drive
<b>City</b>	Vancouver
<b>Postal Code / Zip Code</b>	V5L 3N7
<b>Province / State</b>	BC
<b>Country</b>	Canada

### **JOB POSTING INFORMATION**

<b>Placement Term</b>	2026 - Winter
<b>&lt;b&gt; Job Title &lt;b&gt;</b>	W26 Software Engineering Co-op Student (including embedded software) 172621
<b>Position Type</b>	Co-op Position
<b>Job Location</b>	Vancouver, BC
<b>Country</b>	Canada
<b>Duration</b>	8 months
<b>Salary Currency</b>	CAD
<b>Salary</b>	3800.0 per month for 0 Major List
<b>Salary Range \$</b>	\$3,800 - \$4,200 per month
<b>Job Description</b>	

IKOMED is looking for a talented and self-driven Software Engineering co-op student to join our multi-disciplinary project team in the development of our ATMOS device for the treatment of emphysema. Our treatment uses radiofrequency (RF) radiation to preferentially heat diseased tissue which relies on complex software systems for real time control, sensor data fusion and thermal feedback. Data generated from our device must be collected and analyzed to further refine and develop our integrated hardware and software systems. Some of your responsibilities may include, but not be limited to, the following:

- Provide software support for the ATMOS device software and other R&D infrastructure
- Develop and maintain the graphical user interface software on the device host computer
- Develop and maintain software for sensor data collection, and visualization software for sensor data fusion
- Develop software used in jigs and fixtures
- Maintain and upgrade existing software
- Collaborate with the project team to identify software improvements and implement solutions
- Participate in full software development life cycle for embedded subsystem devices
- Gather and document requirements
- Develop software using real-time operating systems, embedded Linux, etc. for custom hardware
- Develop software for feedback control system, PID controller, digital filters
- Implement unit testing and develop higher-level test plans and test cases

- Data management and analysis
- Develop scripts to collect, process and visualize data from device testing
- Perform statistical data analysis to identify patterns and develop insights for device development

#### **ABOUT IKOMED**

IKOMED Technologies Inc. is a young and energetic medical device company, based in Vancouver BC. We are engaged in the research and development of several ground-breaking medical device technologies.

Our Aegis smart shutter system, which has been cleared as part of a commercial X-ray system by the FDA, incorporates machine vision, artificial intelligence, and a high-speed electro-mechanical system to reduce X-ray radiation in fluoroscopy. Fluoroscopy is a medical imaging technology that is widely used to create real-time videos of internal organs, through X-ray radiation, to guide minimally invasive procedures where catheters or other devices are inserted into the body to diagnose and treat patients. While fluoroscopy-guided procedures reduce the need for surgery and help save lives, they expose medical staff to large amounts of X-ray radiation resulting in risks such as cataracts, cancer, etc.

We are also developing a device for non-invasive treatment of emphysema, a type of COPD (Chronic Obstructive Pulmonary Disease), using RF radiation. Emphysema is a debilitating and progressive disease which is caused by smoking, environmental factors, or genetic factors. It is one of the leading causes of death worldwide. Today, treatment is focused on alleviating symptoms with no cure available. Our goal is to develop and bring to the market a non-invasive treatment method which will improve the lives of millions of patients around the world, increase their productivity, and reduce long-term healthcare costs.

Our small but growing team combines expertise in science, engineering, medical device development, business, and manufacturing. We believe in hiring talented motivated and self-driven people who are strong team players, giving them the direction and resources they need to succeed, and letting them make the right decisions for IKOMED. We also believe in having fun while working hard.

#### **Job Requirements**

We believe in hiring smart people and giving them the direction and resources they need to succeed.

To thrive as a co-op student at IKOMED, you have to have

- Enrolment in a Computer Science program or another relevant engineering discipline
- Strong programming skills in C, C++, Python
- Demonstrated ability to develop software from initial requirements to a functional application
- A solid foundation in the STEM (Science, Technology, Engineering, Math) disciplines
- Enthusiasm for tackling hard problems and a strong drive to get things done
- Excellent problem-solving abilities and attention to detail
- Excellent written and verbal communication and technical documentation skills
- Great interpersonal skills, including maturity, teamwork, respect, courtesy, tact, and discretion

Ideally, you will also have...

- Experience working with Linux and Raspberry Pi, Arduino
- Experience with hardware buses and protocols (Ethernet, USB, SPI, I2C or UART)
- Experience with multi-threaded programming and real-time operating systems
- Familiarity with using Pandas and other Python packages for data processing and analysis
- Understanding of control theory
- Experience with IoT device programming (Wi-Fi, Bluetooth, Zigbee)
- Knowledge in statistics and data science
- Previous exposure to medical device development

**Citizenship Requirement** N/A

#### **APPLICATION INFORMATION**

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