

Job Posting:167758 - Position: S25 Software Development and Verification Engineer - Embedded Systems 167758B

Co-op Work Term Posted:	2025 - Summer
App Deadline	03/17/2025 09:00 AM
Application Method:	Through Employer Website
Posting Goes Live:	03/10/2025 12:08 PM
Job Posting Status:	Approved

ORGANIZATION INFORMATION

Organization	CS Group Canada
City	Montreal
Province / State	QC
Country	Canada

JOB POSTING INFORMATION

Placement Term	2025 - Summer
 Job Title 	S25 Software Development and Verification Engineer - Embedded Systems 167758B
Position Type	Co-op Position
Job Location	Saint-Laurent, QC
Country	Canada
Duration	4 months
Work Mode	Hybrid
Salary Currency	CAD
Salary	Salary Not Available, 0 Major List
Job Description	

Company Description

CS Group Canada, a subsidiary of CS Group and part of the Sopra Steria group, is a leader in the development and certification of safety-critical systems in the aerospace, power, autonomous driving, and cybersecurity industries for companies developing critical embedded technologies.

Our clients include OEMs and Tier 1 suppliers in the aerospace, automotive, defense, and railway sectors, seeking Functional Safety (ISO 26262, DO-178C, DO-254, ARP-4761, ARP-4754, EN50128) and cybersecurity (DO-326A, ISO 21434, UN-R155) certifications to bring their technologies to market.

CS Group Canada offers an exciting opportunity to join a dynamic and fast-growing industry as an intern for the summer 2025.

Job Description

We are looking for a **Software Development and Verification Engineer** to actively contribute to the design and validation of safety-critical embedded software in compliance with industry standards.

Main Responsibilities

Software Development

- Develop and support high-level software architecture in compliance with the DO-178B/C standard.
- Perform key software development phases: specifications, design, coding, and integration.
- Participate in quality reviews and software component integration.

Verification & Validation

- Conduct software testing in accordance with DO-178 requirements.
- Develop and execute automated test scripts using Python or other scripting languages.
- Ensure traceability between requirements, design, and testing.
- Document results and produce necessary technical reports.

Continuous Improvement

- Contribute to the optimization of development processes and tools to enhance quality and efficiency.
- Provide clear technical progress updates and workload assessments to the team lead.

Qualifications

- Bachelor's or Master's degree (in progress) in Software Engineering, Computer Science, Electrical Engineering, or a related field.
- Strong understanding of programming languages (C, Python).
- Familiarity with communication protocols (ARINC 429, CANbus, Ethernet, RS-422, SPI, I2C).
- Experience or strong interest in real-time software development for embedded systems.
- Knowledge of development and testing tools.
- Bilingual in French and English (spoken and written).
- Familiarity with various operating systems, networking, and routing protocols.

Assets

- Experience with Matlab/Simulink and DO-178B/C standards.
- Familiarity with microcontrollers and safety-critical applications.
- Knowledge of C++, Perl, or low-level development.
- Experience with Agile methodologies (Scrum, sprints).

Additional Information

- **Employment Type:** Full-time, Intern
- Please note that only selected candidates will be contacted.

CS Group Canada values workplace diversity and encourages women, visible minorities, ethnic minorities, Indigenous peoples, and individuals with disabilities to apply.

Benefits

- Hybrid work model
- Comprehensive medical, dental, and vision insurance
- Access to telemedicine services
- Retirement savings plan (REER program)
- Personal and sick leave
- Recreation room with pool table and foosball
- Free on-site gym access

All your information will remain confidential in accordance with EEO guidelines.

Inclusive and committed employer, our company works every day to combat all forms of discrimination and promote a respectful working environment. That's why, committed to gender diversity and overall inclusivity, we encourage all applications and profiles.

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through Employer Website

Cover Letter Required? Optional

Special Application Instructions

Application Link: <https://jobs.smartrecruiters.com/CSGROUP/744000041845238-2025-internship-software-development-and-verification-engineer-embedded-systems>

Please click the "I intend to apply to this position" button on SCOPE and also submit your application via the employer's website.

Applications are accepted on a rolling basis and the posting may be expired at any time by the employer as submissions are received.

Students should submit their applications as soon as they are ready.