Job Posting:166429 - Position: S25 Software Analyst Intern (AI, Computer Vision, Deep Learning, C++, Python) 166429

Co-op Work Term Posted:	2025 - Summer
App Deadline	02/12/2025 09:00 AM
Application Method:	Through Employer Website
Posting Goes Live:	01/30/2025 12:56 PM
Job Posting Status:	Expired

ORGANIZATION INFORMATION

Organization	Hitachi Ltd.
Country	Canada

JOB POSTING INFORMATION

Placement Term	2025 - Summer
<b> Job Title <b>	S25 Software Analyst Intern (AI, Computer Vision, Deep Learning, C++, Python) 166429
Position Type	Co-op Position
Job Location	Toronto, ON
Country	Canada
Duration	8 or 12 months
Work Mode	Hybrid
Salary Currency	CAD
Salary	Salary Not Available, 0 Major List

Job Description

Job Title: Software Analyst Intern (AI, Computer Vision, Deep Learning, C++, Python)
Job ID: R1008322
About Us
A career at Hitachi Rail will help create a legacy. With operations in every corner of the world, our work goes to the cutting-edge of digital transformation and technology. From the multi-cultural strength of our global organisation to the sustainable and innovative ways we work to bring people together, there's something for everyone to get stuck into. And that's where you come in.
Toronto, Ontario, Canada (Hybrid)
Internship Duration: May 2025 - December 2025 or April 2026 (8 or 12months)
Job Description
We are currently hiring a Software Analyst Intern to join our Research and Technology Department for an 8- or 12-month internship, starting in May 2025.
As a part of the Research and Technology (R&T) team, you bring your knowledge in robotics, computer vision, fusion algorithms, point cloud processing or machine learning to build, test and review next generation solutions for the transit market. You will be involved in research and development to create "proof-of-concept" products for the urban rail signaling domain.
Key Accountabilities
• Participate in the analysis of complex, real-time, autonomous system use cases
Understand the goal of a research project and support its execution
•Analyze lab and field test results
•Assist with multiple sensors and the latest software algorithms to control complex, safety critical systems
•Become a highly productive team member and team player
Thank you for your interest in Hitachi Rail. If your application is of interest, we will be in contact. Please do not hesitate to discover

more about us and our latest jobs at https://www.hitachirail.com/careers.
At Hitachi Rail, there is a place for everyone. We welcome and value differences in background, age, gender, sexuality, family status, disability, race, nationality, ethnicity, religion, and world view. It is our commitment to create an inclusive environment - we are proud to be an equal opportunity employer.
We would be delighted if you would be one of our followers at https://www.linkedin.com/company/hitachirail.

Job Requirements

Key Requirements

- The successful candidate should be working towards a bachelor's or master's degree from an accredited university or college in Computer Science, Electronics/Electrical Engineering, Mechanical Engineering, or a related field.
- Completion of the first year of your undergraduate degree, or currently pursuing a master's degree.
- Software development experience in C++, Python
- Be familiar with minimum set of Python libraries (numPy, pandas, scikit)
- Practical experience of object oriented techniques, concurrency, parallelism, multithreading, socket programming in a Linux environment
- Knowledge of modern software engineering practices, methods and tools
- Experienced GIT user required
- Knowledge of Docker and containerization
- Knowledge of python versions and virtual environments
- Familiarity with Linux command line
- Experience with text data preprocessing
- Knowledge of LangChain/Ollama frameworks
- Demonstrated ability to follow instructions to deliver a quality technical solution on-time
- Experience with AGILE workflow, JIRA
- Excellent teamwork record
- Possess good written and oral communication skills
- The ability to work 40 hours a week in a hybrid environment for the duration of the internship is essential. At least 2 days a week in the office.

Preferred Qualifications:

- Co-op student available for an 8 to 12-month term, with at least one additional quarter or semester of coursework remaining after the completion of the internship.
- Previous coop work experience is an asset. Relevant school projects may be considered.
- Good knowledge and experience in Machine Learning and Computer Vision, such as sensor fusion, Supervised / unsupervised learning, online learning, classic computer vision algorithms, feature extraction, state estimation
- Knowledge of point cloud processing (Object detection, tracking, matching, SLAM)
- Experience with relational databases such as SQL, PostgreSQL and python integration
- Hands-on experience with sensors, microcontrollers programming
- Experience with LANs and programming for networked and serial data communication types
- Experience with AI techniques such as RAG and deep learning fine tuning
- Knowledge of C++ GPU programming, CUDA, Python GPU processing and Library usage
- Experience with UI/UX design
- Hands-on experience with LLM evaluation (frameworks and dataset creation)
- Good leadership skills and experience

Citizenship Requirement N/A

APPLICATION INFORMATION

Application Procedure Through Employer Website
Cover Letter Required? Yes
Address Cover Letter to Hiring Manager
Special Application Instructions

Application Link:

https://gtsgbu.wd3.myworkdayjobs.com/en-US/Careers/job/Toronto/Software-Analyst-Intern--AI--Computer-Vision--Deep-Learning--C----Python-_R1008322

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.