

Technical Skills

Programming Languages: Python, Java, JavaScript, TypeScript, C++, C, Go, Rust, HTML/CSS

Frameworks & Libraries: React, Next.js, Node.js, Spring Boot, Hibernate, Django, Express.js, Electron, ASP.NET

Machine Learning & Data: TensorFlow, scikit-learn, Pandas, NumPy, LangChain

Developer Tools & Platforms: Git, GitHub, GitLab, Docker, Kubernetes, Apache Maven, Swagger, Kafka, K9s, Elasticsearch

Databases & Cloud: SQL, MySQL, PostgreSQL, MongoDB, SQLite, DynamoDB, Amazon S3

Experience

Tesla

September 2025 - December 2025

Software Engineer Intern

Fremont, California

- Built an **LLM-driven** log-summarization pipeline (**Python**, **OpenAI**, **Apache Airflow**) for manufacturing systems that reduced manual triage time by **20%**, processed $\sim 1\text{M}$ log lines/day, and surfaced anomalies earlier.
- Productionized an existing **Kubeflow** multivariate-correlation pipeline by developing a **Go** orchestration API—handling execution, status feedback, and publishing human-readable reports to **Amazon S3**—enabling self-serve analysis for engineers.
- Built read-optimized **Go** endpoints with **SQL** for correlation insights and time-series metrics, achieving **p95 < 100 ms** latency and cutting ad-hoc data requests from operations.
- Created graphical visualizations with **Matplotlib**, **NumPy**, and **Pandas** to dynamically trace a component's location history across its manufacturing lifecycle, enabling faster triage and clearer end-to-end understanding.

Amazon Web Services

May 2025 - August 2025

Software Developer Intern

Toronto, Ontario

- Designed and implemented an **account registration system** for **AWS Partner** users by building RESTful APIs with **Java**, **Spring Boot**, **EC2**, and **DynamoDB**, enabling seamless partner onboarding at scale.
- Built a **frontend portal** for the registration system using **TypeScript**, **React**, and **Next.js**, giving partners a streamlined interface to manage onboarding and account access.
- Engineered a custom article ingestion pipeline leveraging **AWS EventBridge**, **Python**, and **Amazon S3** to convert **Salesforce documents into HTML articles**, reducing ingestion time and improving content distribution for internal webpages.
- Enhanced **system reliability and observability** across both the registration system and ingestion pipeline by **integrating CloudWatch dashboards and alarms**, which enabled proactive issue detection and **reduced customer tickets by 10%**.
- Streamlined delivery of both services by **containerizing applications with Docker** and automating deployments via **AWS CodePipeline and CloudFormation**, cutting manual release effort and accelerating feature rollout.

Cisco

January 2025 - April 2025

Software Engineer Intern

Ottawa, Ontario

- Designed and deployed a **CLI-based telemetry performance visualization tool** for **gRPC** and **NETCONF** subscriptions, **streamlining CPU and RAM monitoring** and enabling faster debugging of network issues.
- Developed a **real-time process monitoring system in C** that automatically detects and terminates memory leaks and high-CPU processes, **reducing overall memory usage by 20%** and improving system stability.
- Extended **performance visibility to the developer workflow** by building an **automated dashboard with Java**, **Grafana**, and **Kafka** to track daily build changes, **accelerating the detection of breaking commits and reducing debugging time** for development teams.

Qualcomm

May 2024 - August 2024

Software Engineer Intern

Toronto, Ontario

- Led development of a **full-stack desktop color calibration tool** using **Electron**, **TypeScript**, and **React**, allowing users to fine-tune display properties (hue, saturation, brightness) and successfully deployed to **500+ clients**.
- Designed and implemented **backend services with C# and ASP.NET**, integrating **native C++ drivers for color calibration**, which reduced processing latency by 50%.
- Implemented a **CI/CD pipeline for ASP.NET APIs using Swagger**, **NUnit**, and **Jenkins**, improving test coverage and ensuring reliable daily builds with automated code quality reporting.
- Engineered a **cross-platform Python SDK to extract display color and hardware data from Android devices**, replacing a DLL-based solution and significantly improving OS compatibility and scalability.

Nokia

May 2023 - August 2023

Software Developer Intern

Ottawa, Ontario

- Contributed to real-time software development in **Embedded C for Nokia's SR OS**, improving **system performance, scalability, and hardware-level integration** in production environments.
- Integrated **GitLab CI/CD with containerized Pytest suites on a Kubernetes cluster**, enabling **25+ parallel test runs** and dynamic scaling for faster regression coverage.
- Applied **machine learning techniques in Python** using **scikit-learn** and **NumPy** to classify packet patterns and detect **anomalies in encrypted traffic flows**, improving validation efficiency and reducing reliance on manual inspection.

Education

Carleton University

Bachelor of Computer Science, Concentration in Artificial Intelligence and Machine Learning

Ottawa, Ontario

- GPA: 4.0/4.0**