

EDUCATION

B.A.Sc. Software Engineering (Co-Op)

University of Ottawa, Canada

Graduating Winter 2027

GPA: 3.95 / 4.00 | Featured Co-Op Student | Class Rep | Club Director | Deans Honor Roll | World Dragonboat Athlete

SKILLS

Languages: Python | HTML | CSS | JavaScript | TypeScript | Java | Kotlin | Elixir | C | C# | Shell | Rust

Web Frameworks: FastAPI | React | Spring Boot | PlayerUI | Android | React Native | Node | VITE | NEXT | REST | JWT

AI Frameworks: Keras | Scikit-Learn | Tensorflow | LangChain | Docling | Haystack | Pandas | Numpy | CrewAi

DevOps CI/CD: Groovy | Jenkins | Maven | Gradle | Linux | Git | GitHub Actions | Docker | Kubernetes | NGINX

Databases: Neo4J | ChromaDB | Qdrant | Pinecone | SQL | MySQL | MongoDB | Splunk | Elasticsearch

WORK EXPERIENCE (5 of 18)

Thales - Backend Data Scientist

Ottawa, On, Canada

09/2025 – Present

- Delivered a **Full-Stack RAG** platform (**React, FastAPI, Neo4J, Docker**) to query military data with ML insights.
- Built scalable **ETL/ELT pipelines** for data embedding of **1000+** PDFs into **vector databases** with **OCR, VLM, Haystack**.
- Led the **Backend** POCs, implementing graph queries, and containerized microservices for internal and client apps.
- Implemented ML **Genetic Algorithms** (NSGA-II) and containerized ML microservices for internal and client apps.

Intuit - Full Stack Software Engineer

Toronto, On, Canada

05/2025 – 09/2025

- Delivered **Kotlin/Java A/B testing framework** for a new **Credit Karma/TurboTax** transition flow for millions of users.
- Facilitated Intuit’s internal **Generative AI Guild**, training **100+ engineers** on modern AI tools and best practices.
- Strengthened **Frontend** test reliability with AI by creating abstracted **Playwright** and headless **PlayerUI** tests.
- Collaborated with a 23-engineer team for TurboTax onboarding flows that increased revenue by **\$278M (+9%)**.

RBC GenAI Lab - Full-Stack ML Engineer

Toronto, On, Canada

09/2024 – 01/2025

- Build **RESTful backend services** for an **agentic-LLM** financial guidance system, reducing case-resolution time by **70%**.
- Developed **3 LLM-driven POCs** end-to-end with requirements, architecture, quality benchmarks, and client delivery.
- Delivered a **ETL Pipeline** for **500K+** address records at **99.96%** precision, removing **1000+ hours** of manual review.
- Implemented **RegEx Algorithm** & analyzed **HereAPI** and **Cohere** resulting in a **+37%** increase in precision.
- Improved data processing by **37%** with a custom **RegEx parsing engine** and benchmarks on **HereAPI** and **Cohere**.

RBC Capital - DevOps Software Engineer

Toronto, On, Canada

01/2024 – 05/2024

- Achieved a **15%** reduction in **Gradle** build/deploy time using **Groovy** HTTP proxies and dependency optimization.
- Deployed a scalable **GitHub Actions** pipeline using **K8s** and **OpenShift containers** on an **RHEL Linux Server**
- Built **monitoring microservices** tracking **1000s** of developers commits, boosting production velocity of **50+ teams**.
- Spearheaded a centralized SRE/DevOps dashboard (**Splunk, Elasticsearch**) aggregating CI/CD metrics for **30+ apps**.

Ciena - Software Developer

Ottawa, On, Canada

05/2023 – 12/2023

- Led production upgrades across **47 microservices** supporting high-traffic clients (**Google, Amazon, Meta, Twitch**).
- Built **17** ultra-fast **NoSQL** DB migration tests (avg 0.10s) preventing **12** production-blocking failures pre-release.
- Delivered **40+ features** across **20+ codebases** using C-programming, Python, and distributed system tooling.
- Created **20+ Python** unit-testing suites adopted across teams to accelerate integration and validation workflows.

PROJECTS (3 of 36)

uOttHack - Director

Ottawa, On, Canada

09/2022 – Present

- Increased **company partnerships** by **77.8%** | **funding** by **36.3%** | **project submissions** by **55%** | **attendees** by **32%**.
- Secured **international partnerships** across HKUST (**Hong Kong**) and Tec de Monterrey (**Mexico**) alongside uOttawa.
- Directed a team of **30+** to develop the **official site** and **live-event site** using Node, React, MongoDB, and Vercel.

uOttApply - Student Application Portal

- MEAN Stack WebApp** used by **2500+ hackers** to apply for uOttHack, leveraging **Next.js, Firebase & Vercel**

Rules-Lawyer – Customizable AI Boardgame Chat

- Upload a boardgame for a **custom AI Chat**. Built in **JWT Security FastAPI/React, OCR, VLM Models, Neo4J GraphDB**