

Devon Knight

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EDUCATION

University of Ottawa, Bachelor of Applied Science, Software Engineering (Co-Op) **Graduating Dec 2026**
GPA: 3.9/4.0 • SWE Class Representative • 7x Scholarships • World Championship Dragonboat Team • Deans Honor Roll

SKILLS

Languages: Python • Java • TypeScript • JavaScript • C
Web Frameworks: FastAPI • Spring Boot • React • Next.js • React Native • Node.js • REST APIs
AI and Data Science: PyTorch • TensorFlow • LangChain • LangGraph • Haystack • Scikit-Learn • Pandas • NumPy
Databases: PostgreSQL • MongoDB • Neo4j • Firebase • Supabase • Pinecone • Qdrant • ChromaDB
Infrastructure: Docker • Kubernetes • GitHub Actions • Jenkins • Linux • Git • Splunk • Agile • Cisco CCNA coursework

EXPERIENCE

Cisco, Software Engineer Intern Ottawa, Canada May 2026 – Present

- Developed an Agentic AI system that automates unit testing for C/C++ in the Nexus **operating system** for data center switches.
- Improved agent execution speed by **87.5%** through context engineering and custom AI tools that isolated relevant code context.
- Built a **libclang**-based AST pipeline that automatically generated dependencies and mock scaffolding for **C/C++ unit testing**.
- Built a framework-agnostic adapter registry (**CMocka**, **FFF**, **CppUTest**) with Jinja2 templating and Bazel build scaffold generation.

Thales, Data Scientist Intern Ottawa, Canada Sept 2025 – May 2026

- Developed a full-stack ML app supporting a **\$5.2B defense contract**, securing continued funding after stakeholder demos.
- Designed a **Full-Stack** data platform to query live military data and gain ML predictions using FastAPI, Haystack, Neo4J, Docker.
- Implemented ML **Genetic Algorithms (NSGA-II)** to provide heuristic analysis and optimal choices for effortless client decisions.
- Built scalable **ETL pipelines** converting raw data tables and documents to embeddings in **vector databases** with **OCR**, **Haystack**.

Intuit, Full Stack Software Engineer Intern Toronto, Canada May 2025 – Aug 2025

- Developed **data-driven** webpage variants for customer pricing offers and onboarding flow, in **Java/Kotlin, React, PlayerUI**.
- Refined an automated testing framework in Java for test-driven development of **Credit Karma** to **TurboTax** onboarding flow.
- Presented talks in Intuit Toronto's new **Generative AI Guild**, training **50+** engineers on the latest open-source Agentic AI tools.
- Collaborated with a **23-engineer** team for TurboTax onboarding flows that achieved an increase in TurboTax revenue by **9%**.

Royal Bank of Canada, AI Engineer Intern Toronto, Canada Sept 2024 – Dec 2024

- Launched a **production-level anti-fraud** application for 3 countries, validating **500K+** addresses with **99.96%** precision.
- Designed an investment report analyst **AI agent** using LangChain, reducing review time of earnings reports by **70%**.
- Improved data processing by **37%** by implementing a custom **Regex** parsing algorithm and benchmarks on **HereAPI** and **Cohere**.
- Led **communication with clients**, deriving functional requirements, and deliverable action items for productive Agile sprints.

Royal Bank of Canada, DevOps Engineer Intern Toronto, Canada Jan 2024 – Apr 2024

- Delivered a **monitoring microservice** that tracks production errors, Used by engineering teams across thousands of developers.
- Spearheaded a DevOps dashboard project with CI/CD metrics for **30+** apps logged in **Splunk**, **Elasticsearch** reducing downtime.
- Replaced **Jenkins** with a scalable **GitHub Actions** pipeline using **Kubernetes** and **OpenShift containers** on an **RHEL Linux Server**.
- Achieved **15% faster** build & deploy time by automating manual build tasks with Gradle, Groovy, & Kubernetes.

Ciena, Software Engineer Intern Ottawa, Canada May 2023 – Dec 2023

- Led production upgrades across **47 microservices** supporting high-traffic clients such as **Google, Amazon, Meta, Twitch**.
- Authored **17** fast DB migration tests (avg 0.10s) using Python and MongoDB, preventing 12+ production failures pre-release.
- Created **20+ Python** unit-testing suites for a **NoSQL** database to accelerate data-integrity and validation workflows.
- Shipped **34+** features across **20+** codebases using C, Python, expanding product functionality.

PROJECTS

CalTrack, NVIDIA Edge AI Winner 2nd Place Stanford University TreeHacks Feb 2026

- Simplified crisis prediction by mapping **650K** users over high-risk fire zones using an **Apple WIFI Hack** and NVIDIA Earth2 model.
- Built a **forest-fire** search and rescue response dashboard powered by AI agents, Twilio, and NVIDIA Nemotron models.

uOttHack, Director Canada's Largest Hackathon Sept 2022 – Present

- Drove funding growth by **36.3%**, sponsorship deals by **77.8%**, project submissions by **55%**, and attendees by **32%**.
- Directed a cross-functional team across **Ottawa, Mexico**, and **Hong Kong's** leading universities with University of Ottawa.
- **Capstone Project**: Currently developing a **CRM** to simplify the hackathon directing experience for students and companies.