Devon Knight: Software Engineer Co-Op Internship Summer 2025

EDUCATION

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

University of Ottawa

Ottawa, ON, Canada, 12/2026

- CGPA: 3.95 / 4.00: Data Structures and Algorithms, Android Dev, Digital Logic, Operating Systems, Linear Algebra.
- World Championship Athlete 2024, Class Rep, ENG Board of Directors, Funding Manager, Deans Honor Roll

H.B.Sc. Medical Science CGPA: 3.92 / 4.00 Western University London, ON, Canada

SKILLS

- Most Used: Python, React, Java, Docker, GPT, CrewAi, Front-End, Splunk, HTML/CSS, Agile, Git, Linux, GitHub.
- Experienced: C, Unix, Bash, Shell, ReactJS/Native, JavaScript, MongoDB, REST APIs, SQL, MySQL, REST, JSON.
- Beginner: C++, C#, Android, TypeScript, Assembly, Groovy, Jenkins, Maven, Gradle, Kubernetes, Node, NEXT, R.

WORK EXPERIENCE

Machine Learning Engineer (4 Month Co-Op) RBC Gen Ai Lab

Toronto, ON, Canada, 09/2024 - 01/2025

- Co-developed an LLM-assisted case generator with CrewAi, Llama 70B, achieving instant advisor case resolution.
- Automated investment reports in 24s per stock showing a 99.994% confidence in LLM's saving mean work hours.
- Built a full-stack address cleaner saving 1,000's of man-hours using React, JS, Langchain and LlamaIndex.
- Utilized vector databases such as Qdrant, ChromaDB, and Pinecone for efficient data storage and retrieval.

DevOps Engineer (4 Month Co-Op)

Royal Bank of Canada

Toronto, ON, Canada, 01/2024 - 05/2024

- Contributed to Canadian Technology History with the seamless 48-hour acquisition of HSBC technology to RBC.
- Reduced **Gradle build and deploy time** by **15%** with **Groovy** that operate HTTP proxies and Open-Shift Containers.
- Built 1 Prototype DevOps pipeline with GitHub Actions and Runners, increasing efficiency across 54 Dev Teams.
- Designed an automated DevOps control panel tracking 1,000's of developer commits and managing downtime.

Software Developer (8 Month Co-Op)

Ciena

Ottawa, ON, Canada, 05/2023 - 12/2023

- Served Google, Amazon, Twitch, Meta, and Microsoft clients with an upgrade to 47 server microservices.
- Co-led a back-end NoSQL MongoDB database testing feature catching 12+ faults and prevented major incidents.
- Led 24+ JIRA's across 18 repositories using C, Python, JSON, Jenkins, Shell, Linux, Bitbucket, and Git.
- Implemented a **novel Python Unit Test** framework with **17 test suites** that runs in an impressive **0.10 seconds**.

Machine Learning Research Assistant

University of Toronto

Toronto, ON, Canada, 05/2019 - 09/2022

- Conducted data-analysis from 28 patients using Python, Microsoft Excel and R-Studio with weekly data-reports.
- Co-led a clinical study showing 83% decrease in surgery complications with patient-Ai-doctor interaction.
- Co-authored a peer-reviewed publication on the use of ML in post-operative recovery, cited 25+ times in the field.

Computational Genetics Researcher

Western University

London, ON, Canada, 06/2018 - 05/2019

- Identified 4 Cancer-Causing genes using Linux, Python, and 3D modelling, saving over \$8,000 of lab materials.
- Presented **4 Canadian medical research conferences**, receiving **3**rd **place** out of 26 students in Ontario-Quebec.
- Co-authored 2 scientific papers & led 3 talks, collectively achieving over 1,000+ downloads and cited 10+ times.

LEADERSHIP

Director & Software Developer

uOttaHack

11/2022 - Present

- Represented Canada and built an <u>international</u> collaboration between uOttaHack and Tec de Monterrey to bring accessible resources to 800+ students across the world becoming the only Canadian international hackathon.
- Coordinated an 800+ student hackathon by building an official site and live-event site using Node/ReactJS.
- Yielded an annual marketing impact of 44.8k views, and 25 Company Partners with new team strategies.

Co-Founder

VaporWare Games

01/2024 - Present

- Developing with Godot Game Engine and Sprite-work in Aseprite to produce a captivating 2D horror survival game.
- Utilized GDScript and C# with Art designers to implement the game in the Godot Game Engine to create a prototype.

PROJECTS

The NeverEnding Story

Gen Ai Lore Building

github.com/Devcon324/NeverEnding-Story

- Developed an infinite **D&D game** story with **Meta Llama 3.2 90B** generating a chapter every hour using **Linux bash**.
- Designed an algorithm in Python to read files quickly and feed the story to AI to write the proceeding chapter

Co-Med

UofT Hacks 11

github.com/uOttaHackUofT/Co.med

- A full-stack LLM Al-assisted hospital triage app built with ReactJS, REST, Next.js, and Cohere's LLM Gen Ai
- Utilized supervised learning to provide suggested diagnosis, prognosis, and triage level with ranked sources.

uOttaApp

uOttaHack Development Team

github.com/Devcon324/uOttaApp

- Developed an event tracker mobile application that **tracked 650+ students**' attendance, food, and raffle tickets.
- Built as a full-stack mobile app with React Native, HTML, CSS, JavaScript and Google Cloud's Firebase