# Devon Knight: Software Engineer Co-Op Internship Fall 2024

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Hi, I'm Devon! I am a Software Engineering student with a previous career in Health-Tech Research. I am open to any Development roles. I also have interests in Graphics, Ai, Gaming, Health, Aerospace, Cyber-Sec, & Full-Stack.

#### **EDUCATION**

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

**University of Ottawa** 

Ottawa, ON, Canada, 12/2026

- GPA: 3.9 / 4.0: Digital Logic, Computer Architecture, Linear Algebra, Data Structures and Algorithms, Android Dev.
- Repping Canada at Dragonboat Worlds Italy 2024, Class Rep, Sponsorship Manager, Deans Honor Roll.

H.B.Sc. Medical Science GPA: 3.9 / 4.0 **Western University** London, ON, Canada, 07/2019

**SKILLS** 

Most Used: Python, Java, Docker, Splunk, HTML, CSS, UML, Firebase, Git, Linux, GitHub.

- Experienced: C. Unix, Bash, Shell, ReactJS/Native, JavaScript, MongoDB, SQLite, SQL, NoSQL, REST, JSON.
- Beginner: C++, C#, Android, TypeScript, Assembly, Groovy, Jenkins, Maven, Gradle, Kubernetes, Node, NEXT, R.

### **WORK EXPERIENCE**

**DevOps Engineer Co-Op Intern** 

**Royal Bank of Canada** 

Toronto, ON, Canada, 01/2024 - 04/2024

- Contributed to Canadian Technology History with the seamless 48-hour acquisition of HSBC platforms to RBC.
- Reduced deployment time by 15 minutes per developer by writing automation scripts in Groovy and Shell that set up security and Gradle builds such as HTTP proxy, Jenkins, and Open-Shift Container Platform.
- Implemented the latest GitHub Actions and GitHub Runners with Google's Bazel Build Tool to build Docker Images and run Docker Containers on a Kubernetes Server, reducing complexity for developers.
- Designed an automated DevOps data dashboard of our CI/CD pipeline with IBM UCD, Shell, and Splunk.

**Software Developer Co-Op Intern** 

Ciena

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

- Co-led an implementation of a Backend NoSQL MongoDB database feature across 47 microservices
- 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 automated tests, reducing development time when running **Jenkins** builds by ensuring compliance to design by running tests in an impressive **0.10 seconds**.

Machine Learning Researcher

**University of Toronto** 

Toronto, ON, Canada, 06/2019 - 02/2022

- Effectively compiled quantitative and qualitative statistics from 28 patients using Microsoft Excel and R-Studio.
- Demonstrated that patient-Ai-doctor interaction has an 83% positive impact on post-operative recovery.

**Computational Genetics Researcher** 

**Western University** 

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

- Predicted the cancer potential of 4 genes using Linux, Python, and 3D modelling, to guide financial investment.
- Presented at 4 Canadian medical research conferences, receiving 3<sup>rd</sup> 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.

## **PROJECTS**

Co-Med

**UofT Hacks 11** 

github.com/uOttaHackUofT/Co.med

- An LLM Al-assisted hospital triage web-application built with REST, Next.js, and Cohere's Large-Language Model
- Utilized **supervised learning** to provide suggested diagnosis, prognosis, and triage level with ranked sources.

**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

**Dungeons and Dragons Buddy** 

**Devon Knight** 

github.com/Devcon324/DandD Buddy

- Play speed increased by ~99.3% by implementing a search algorithm that parses 149+ pages of textbook data.
- Built by using object-oriented design, Python, JSON, Selenium web-scraping, and the Discord.py API.

## **LEADERSHIP**

Software Developer → Director of Sponsorship

**uOttaHack** 

11/2022 - Present

- Fostered a community of 850+ students within 4 months by leading company and university collaborations.
- 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.

Speaker & Panelist

**Canadian Undergraduate Software Engineering Conference** 

01/2024

- Keynote speaker to 400+ professionals about the power of domain knowledge in software engineering.
- Led discussions on careers in technology, academic research, machine learning, navigating life as a scientist.

Software Engineering Canadian Rep

Dean of Engineering

10/2023

 Selected to represent uOttawa to facilitate a cross-institutional collaboration between uOttaHack and Tec de Monterrey to host 800+ students across the world becoming one of the two Canadian international hackathons.