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

Mevon.donald.knight@gmail.com | (647) 920-3519 | Inkedin.com/in/devonknight | Qithub.com/Devcon324

Hi, I'm Devon! I'm a Software Engineering student with a previous career in Health-Tech Research, I am open to any Development roles with interest in Graphics, Ai, Gaming, Health, Embedded, Network, & 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.
- 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**

- Proficient: Python, C, Java, Docker, HTML, CSS, UML, Firebase, Splunk, Git, Linux, GitHub.
- Experienced: 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 - Present

- 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 Built Tool to build Docker Images and run Docker Containers on a Kubernetes Server, reducing complexity for developers.
- Designed an automated **DevOps Research Assessment** dashboard of our pipeline that builds **12 Applications** using IBM Urban Code Deploy, Shell, and Splunk so tech-leads easily manage large product deployments.

### 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 by leading 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 Excell 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 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 7 scientific publications collectively achieving over 1,000+ downloads and 5+ citations.

# **PROJECTS**

Co-Med

**UofT Hacks 11** 

github.com/uOttaHackUofT/Co.med

- An LLM Al-assisted hospital triage system 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.

#### **uOttaApp**

**uOttaHack Development Team** 

github.com/Devcon324/uOttaApp

- Developed an event tracker mobile app 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 data.
- Built by using object-oriented design, Python, JSON, Selenium web-scraping, and Discord.py API.

# **LEADERSHIP**

### **Developer** → **Director**

uOttaHack (Canada's Capital Hackathon c.2018)

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

- Presented as a keynote speaker to 400+ students and professionals, emphasizing the power of non-technical domain knowledge in software engineering with philosophies of success that translate into the tech field.
- Led discussions on the parallels between careers in technology and academic research, topics such as machine learning applications, navigating life as a scientist, and the transformative impact of research on critical thinking skills.

## **International Experience Scholarship**

**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.