

Devon Knight: Software Engineer Intern Fall 2024

✉ devon.donald.knight@gmail.com | ☎ (647) 920-3519 | [in linkedin.com/in/devonknight](https://www.linkedin.com/in/devonknight) | github.com/Devcon324

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, Mobile Apps.
• **World-Champion Dragonboater, Class Representative, Engineering Sponsorship manager, Deans Honor Roll.**
H.B.Sc. Immunology GPA: 3.9 / 4.0 Western University *London, ON, Canada, 07/2019*

SKILLS

- **Proficient:** Python, C, Java, HTML, CSS, JavaScript, UML, Shell, Git, Jenkins, Linux, GitHub, Android Studio.
- **Experienced:** Unix, Bash, ReactJS, React Native, MongoDB, SQLite, SQL, NoSQL, REST, JSON.
- **Base Knowledge:** Unity, C++, C#, TypeScript, Assembly, Groovy, Maven, Gradle, Node.js, NEXT.js.

WORK EXPERIENCE

DevOps Engineer Intern Royal Bank of Canada *Toronto, ON, Canada, 01/2024 – 04/2024*
• Optimizing the deployment process for RBC SRE/software engineers via an automated **CI/CD pipeline** through the use of **Jenkins, Java, Scala, Groovy, Gradle**, and **Maven**, for shorter build times and expedite feature releases.
• Coordinating across **12 different organization repositories** to integrate our novel pipeline and collecting metrics to later conduct **data-processing** and identify sources of development lag phases that can be expedited.

Software Developer Intern Ciena *Kanata, ON, Canada, 05/2023 – 12/2024*
• Co-led an implementation of a **backend, NoSQL MongoDB database** feature across 47 microservices by efficiently handling **24+ JIRA's** across **18 repositories** using **DevOps tools**, Confluence, **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**.
• Collaborated with an international team of **15 software engineers** in debugging and enhancing data communication infrastructure in **Python** and **C**, resulting in **improved product development** and customer satisfaction.

Machine Learning Researcher University of Toronto *Toronto, ON, Canada, 06/2019 – 02/2022*
• Quantified how artificial intelligence enhanced surgical recovery through **7 statistical reports** built with Excel.
• Effectively compiled quantitative and qualitative statistical data from **28 patients** and showed that AI chatbots have an **83% positive impact** on the user experience during post-operative recovery **within 6 months**.

Computational Genetics Researcher Western University *London, ON, Canada, 06/2018 – 05/2019*
• Predicted cancer potential of 4 genes using **Linux, Python** and **3D modelling**, which guided funding allocation.
• Presented at **4 Canadian conferences**, receiving **3rd place out of 26** national research students in Ontario-Quebec.
• **Co-authored 2 peer-reviewed research papers** collectively achieving **1,000+ downloads** and **5 citations**.

PROJECTS

Co.Med UofT Hacks 11 github.com/uOttHackUofT/Co.med
• Reduced hospital overload by building an **AI-assisted** hospital triage system with **REST, Next.js**, and **Cohere's Large-Language Model** to provide a suggested diagnosis, course of action, and triage level with ranked references.

uOttApp uOttHack Dev Team github.com/Devcon324/uOttApp
• Developed an event tracker mobile app that **tracked 600+ attendees'** workshop attendance, food vouchers, and raffle tickets by building a **full-stack mobile app** with **React Native, HTML, CSS, JavaScript** and **Firebase**

Dungeons and Dragons Buddy Devon Knight github.com/Devcon324/DandD_Buddy
• Improved player experience by implementing a **search algorithm** that parses **over 149 pages of data** to generate game content by using **object-oriented design, Python, JSON, Selenium web-scraping**, and the **Discord.py API**.

LEADERSHIP

Software Developer → Director uOttHack (Canada's Capital Hackathon c.2018) **11/2022 – Present**
• Fostered a community of **600+ students** within **4 months** by leading workshops, intern panels, and company events.
• Coordinated a **500+ student** hackathon by building an **official site** and **live-event site** using **NodeJS**, and **ReactJS**.
• Yielded marketing impact of **44.8k views**, and **\$54,000** in sponsorship in one year by introducing new team strategies.

Speaker & Panelist Canadian Undergraduate Software Engineering Conference **01/2024**
• Presented as a **keynote speaker** to **400+** students and professionals on the approach of software engineering coming from another discipline of medical science and philosophies of success that translate to the technology field.
• Deliberated the commonalities of careers in tech and health-**academic research** with discussion about **machine learning**, life as a **published scientist**, how research expanded my **critical thinking**,

International Experience Scholarship Dean of Engineering **10/2023**
• One of two leaders selected to foster a partnership between **uOttHack** and **Tec de Monterrey**, MEX students to facilitate a **cross-institutional** collaboration to host **800+ students** across the world for an **international hackathon**.