

EDUCATION

University of Waterloo | Bachelor of Computer Science, Honours, Co-op Program | 2021 - 2026

Relevant Courses: Designing Functional Programs, Algorithm Design and Data Abstraction, Logic and Computation, Object-Oriented Software Development

Extracurriculars: Senior Events Lead Coordinator (UW Computer Science Club), Bollywood Hip-Hop Choreographer (UW Dhamaka)

WORK EXPERIENCE

Cisco | Software Engineer Intern

Ottawa, ON ~ May - Sept 2023

- Involved in the IOS XR Forwarding Infrastructure Base (FIB) team, overseeing code memory management and efficiency using C to cater to high-end clients like **Microsoft, Google, Meta and Apple**
- Optimized the cyclomatic complexity of **50+** functions resulting in an average reduction of **80%** in **McCabe Complexity** rate. Leveraged the workflow automation tool **FireX** and debugging tool **GDB** to streamline module unit test procedures.
- Resolved all **130+ Valgrind UninitCondition** errors and multiple **LSAN** leaks achieving the recovery of over **5000** bytes of memory
- Attained advanced expertise of **CLI, Yang** data model, and the **Event Manager (EVM)** library through an immersive bootcamp

MNP Digital | Developer Intern

Richmond Hill, ON ~ Jan - Apr 2023

- Engaged in the Northern Ontario Heritage Fund Corporation (NOHFC) Project for 5 sprints customizing components in **Microsoft Dynamics 365 CRM** and supported the integration of **DocuSign** and **CIBC**
- Devised a flow solution and refactored the process of population of word templates using **dynamicfileSchema** concepts and **Power Apps**. Led to a **80%** reduction in flow runtime and **55%** enhancement in the accuracy of field population.
- Contributed to the development of **Power App Portal** pages utilizing **JavaScript/JQuery** Web Resources within **XrmToolBox** to be used by over **40 000+** users
- Practiced **Agile Scrum Methodology** through daily agile scrums and harnessed **Azure DevOps** for project management purposes

University of Waterloo WIL Programs | e-Learning Developer

Waterloo, ON ~ Apr - Dec 2022

- Utilized wireframes, **HTML5**, and **Bootstrap 5** to develop interactive modules for the Strategies for Workplace Success course, resulting in a surge of **70%** in content engagement
- Maintained their **Learning Management System D2L** by developing dynamic and static components using **CSS3** and **JavaScript**, and conducted user-testing

PROJECTS

IASLR (Interactive ASL Recognition) Python, PyCharm, OpenCV, MediaPipe

- Applied **Google's MediaPipe** framework and **OpenCV** library in conjunction with backend modules **palm detection** and **landmark**, resulting in real-time translation of ASL hand gestures with a precision level of **85%**

H_004 COBWEB, Java | MIT COVID-19 Challenge

- Developed a dynamic model/simulator on **COBWEB**, a **Java** applet, to replicate the adaption of 3 agents to a changing environment
- Performed a comparative analysis focusing on the refined dispersal of medical supplies attaining an assessment of **98%** efficiency at 1668 ticks, emphasizing the potency of controlled allocation strategies

SKILLS

Languages: Java, Python, C#, C++, Racket, JavaScript, HTML5, CSS3, C, SQL, R, Shell Script, Yang, HLSL

Systems (Frameworks/Libraries): GDB, Valgrind, Git, Linux, OpenCV library, MediaPipe, Bootstrap 5, jQuery, Node.js, React

Platforms: Unity, Microsoft Power Platform (Power BI, Power Apps, Power Automate, Power Virtual Agents, Power Pages), XrmToolBox, Azure DevOps, COBWEB

CRM Software: Microsoft Dynamics 365

Certification: Microsoft Certified: Power Platform Functional Consultant Associate