

EDUCATION

McGill University

September 2019 – May 2023

Montreal, Canada

Degree: Bachelor in Engineering / Major: Software Engineering (GPA: 3.93/4) Dean's Honour List all semesters.

EXPERIENCE

Microsoft SWE Intern

May 2022-August 2022

Microsoft
USA

Redmond, WA,

- Implemented feature for the Azure VM Integrity and Confidentiality team that allowed Azure Portal users to sign kernel modules when booting a PC using custom cryptographic signatures and install them into the operating system of VMs using C#, Powershell, Secure Boot, and Microsoft Azure's SQL database.
- This project is expected to allow thousands of Azure users to load their custom components into VMs.

Microsoft SWE Intern

May 2021-July 2021

Microsoft

Montréal, Canada

- Created a single portal to automatically release machine learning models that can detect malicious Outlook emails using C# and Cosmos database.
- This project is expected to allow MSTIC-R2 engineers to release 10 times as many models, saving them 1080 hours of work every year.

Microsoft Explore Intern

May 2020-August 2020

Microsoft

Montréal, Canada

- Implemented a supervised learning algorithm by preprocessing, cleaning, and analyzing 800000 emails to automate responses by the MSRC Security Program Manager (SPM) team of Microsoft using Python and SQLite.
- The project is expected to save SPMs 600 hours or 25 days each year
- Communicated project deliverables, deadlines, and progress to key project stakeholders

Junior Project Manager at Computer Science Taskforce (CTF)

September 2019-January 2020

McGill University

Montréal, Canada

- Led a four-week project customizing Windows OS for CTF managed computers helping computer science undergraduates log in faster by reducing the computers' booting time by 20%. Used Bash and Powershell.

AWARDS AND DISTINCTIONS

- Recipient of the Excellence Bursary for Computer Science, Computer Engineering and Computer Construction, and Electrical, Electronic and Communications Engineering by Minister of Higher Education

April 2021

PERSONAL PROJECTS

Minimalist Blockchain Scalability Study

September 2022-April 2023

- Created a simplified blockchain system from scratch to test the scalability of such technology with respect to transaction throughput using Rust. The blockchain system is based on the design of the bitcoin blockchain.
- This project demonstrated that it is possible to create a blockchain system in which most operations are linear ($O(n)$) in time complexity, thereby indicating that blockchain is scalable.
- Link: <https://github.com/aaronmills0/blockchain-capstone>

Carshop Application

April 2021

- Worked in a group of five to create a carshop application using MVC design pattern that allows various services to be specified and then supports the owner of the business in the appointment booking process using Java, Umple, and Gradle.
- Link: <https://github.com/samiad2788/carshop>

SKILLS

- Languages: Java, Rust, Python, C/C++, SQLite, C#, Powershell, Bash, Angular, React
- Speaks English, French, and Arabic