## **Education**

### B. Eng. | Sept 2018 – April 2023 | Carleton University

* Major: Computer Systems Engineering with a GPA of 4.0.
* Related coursework: Computer architecture, Object-oriented development, Data structures and algorithms, Intro to machine learning, Network and cyber security, Communications engineering, Project management

## **Experience**

### Software Quality Assurance Intern | Circle NVI | May 2021 – July 2022

* Proposed, developed, and maintained a scalable **automated testing framework** using Selenium/Python.
* Responsible for performing and documenting **software testing** steps on various platforms.
* Designed medium-fidelity **mock-ups** and architecture plan for mobile app.
* Implemented a **Continuous Deployment pipeline** to optimize development and testing workflow.
* Worked with customers to gather requirements and usage workflows.
* Used and maintained Docker environments in Linux to simulate deployment.

### Infrastructure Intern | Hatch Ltd. | May 2018 – September 2018

* Worked with Light Rail Transit team to analyze traffic flow using simulation software.
* Worked with Software Development team to build in-house simulation integration tool.

### Teaching Assistant | Carleton University | January 2021 – Current

* Responsible for helping students understand and apply concepts from Python and C/C++ courses.
* Worked with professors and coworkers to improve course delivery using student feedback.

### Student Outreach Representative | Carleton University | December 2019 – December 2022

* Reaching out to prospective students and answering queries about program specifics and university life.
* Documenting interactions between students and callers.

## **Projects**

StaySafe

* Developed a person-tracker device that counted people entering and exiting a doorway to keep count of the number present in a store; designed to help reduce the spread of COVID-19 in small indoor spaces
* Built using a Raspberry Pi and a connecting app that can be installed on any android device to share a live video feed.

### Autonomous Car – Lane Following System

* Implemented an edge-detection-assisted Deep Learning hybrid model to identify lane boundaries in real-time in an autonomous car.
* Used traditional optimization techniques and pre-processing to reduce layers and analyze live video on-device.

## **Skills**

* Languages: Python, Java, C/C++, Verilog, Linux/Unix Kernel, Windows Command Line, Bash
* Tools: Deep Learning (CNN), Computer Vision, TensorFlow/PyTorch, OpenCV, Git, JIRA, TeamCity, BitBucket, Docker, Maven, PyTest, OpenSSL, Embedded / SoC Dev
* Leadership: Skills gained as an Air Cadet Warrant Officer and as a Teaching Assistant, mentored students to facilitate learning

## **Accolades**

Eric Sigurdson Award – 2020-22 | Dean’s Honor List recipient –2019-22 | J. Lorne Grey Scholarship – 2019