

EDUCATION

McMaster University
 B.Eng. Computer Engineering

Sept. 2017 to June 2022

SKILLS

PROGRAMMING LANGUAGES: Python, C, C++, C#, Java, JavaScript, TypeScript, HTML, CSS, SQL, MATLAB, LaTeX, Verilog, Assembly

FRAMEWORKS/LIBRARIES: Express, Bootstrap, Flask, React.js, ASP.NET, AWS, MongoDB, Git, Bash, MSSQL, Node.js, Azure, OpenCV, Restful API, Angular, Tensorflow, Specflow, Darknet, Jasmine, Protractor

HARDWARE / TOOLS: Arduino, Raspberry Pi, Oscilloscope, Soldering, Linux, STM32, 3D Printing, Nvidia Jetson

EMPLOYMENT

SOTI INC.

Cloud Software Developer Intern

Mississauga, ON
 May 2019 to Current

- Work in an **Agile** team to develop, test, implement and maintain cloud server software with established processes
- Develop and maintain a **microservices**-based cloud management system that manages 10000+ cloud VMs, with **EC2** and **S3** APIs using **C#.NET** and **MS SQL**, deployed on **AWS**
- Involve in designing and building new CMS frontend using **Angular** and **Google Charts**
- Automate unit, integration and e2e testing using **NUnit**, **Specflow**, and **Protractor**
- **Lead** and **develop** a monitoring dashboard project for the company's software license server from scratch using **ASP.NET Core** and **Angular**

MCMaster UNIVERSITY, FACULTY OF HEALTH SCIENCES

Application Developer Intern

Hamilton, ON
 May 2018 to Aug. 2018

- Developed a web application used by Faculty of Health Sciences to facilitate a more efficient generation of medical simulation scenarios used for training healthcare providers, decreased the generation time by 50%, built with **Node.js**, **Express**, **Angular.js**, **Bootstrap** and **MySQL**
- Migrated the application and existing simulation data to the internal data center

PROJECTS

BUDGET BUDDY (HACK THE NORTH 2019)

Sept. 2019 to Sept. 2019

- Developed a web based financial analysis tool using unsupervised learning model and TD da Vinci API. Powered by Node JS server deployed on Microsoft **Azure**
- Frontend developed in **Angular** and used **Google Cloud** API
- Project wrote in **TypeScript**, **Node.js** and **Python**

BANKING CAT (DELTA HACKS V)

Jan. 2019 to Current

- Developed a ChatBot to recommend the best banking solutions to the user by analyzing their uploaded banking statements.
- Built with DialogFlow **NLP** Platform and connected to the **MongoDB** Server on **Google Cloud Platform**, applied data analysis using Microsoft **Azure** API
- Deployed on Amazon Alexa, Google Assistant, and developed a web-frontend chatbot window.
- Project developed in **HTML**, **CSS**, **jQuery**, **Bootstrap** and **Node.js**

AWARDS

McMaster IMPACT Project · TOP 3 & BEST PRESENTATION

Dec. 2017

- Top 3 teams among 1st year engineering students

DJI RoboMaster Robotics Competition · 3RD PRIZE

Aug. 2019

- The participating teams independently develop different types of robots, and launch projectiles in a mixed-terrain battlefield.

ACTIVITIES

MAC ROBOMASTER TEAM · PR Manager & Computer Vision Team Member

Sept. 2018 to Current

- Represent McMaster University to participate in the DJI RoboMaster Robotics Competition and achieved 3rd prize in 2019
- Authored grant proposals to secure funding and prepared **marketing** materials to bring in new sponsors
- Work in the computer vision division under a team of 50+ on deep learning, data scraping and computer vision for RC robots
- Implemented CV (distance measurement and object-tracking) modules in **Darknet** and **OpenCV(C++)** on NVIDIA Jetson TX2, and improved the aiming accuracy by 30%
- Work with control system division on the interaction with CV module, using **STM 32**-based microcontroller and program using **C**

MCMaster SUMOBOT CLUB · President

Apr. 2018 to Aug. 2019

- Elected to **lead** team of 10+ student executives organizing a robot club and hosting two sumo-robot competitions that challenges students to design their own autonomous fighting robots, which are pitted against each other in tournament-style, one-on-one wrestling matches, attended by 300 participants among the university
- **Host** hands-on tutorials and workshops for beginners
- Club membership grew 60% in one year
- Learn more at <https://sumobotca.wordpress.com>