

## Experience

### Technical Captain | uOttawa Bionics

Sep 2018 - Present

- Contributed to the technical progress and gave counsel to the development of a four-degree of freedom (DOF) hip-mounted exoskeleton for rehabilitation
- Designed and manufactured the electrical subassembly of the exoskeleton and a suit stand for showcasing
- Conducted preliminary research to further optimize the design of the exoskeleton's hip and cuffs

### Innovation Program Manager | Department of National Defence

Jan 2021 - Apr 2021

- Aided in the testing of SmartShape, a digital twin visualization software
- Programmed using Python and machine learning for an OpenBCI headset to interpret EEG signals
- Authored a report on sewage treatment innovations in Canadian ships

### Technical Support Engineer | Quality Online Education Group

May 2020 - Aug 2020

- Designed and developed client and server-wide web applications
- Created consistent applications with JavaScript and React Redux
- Utilized Spring Boot with Java to create a robust back end to persist data to a SQL database

### Quality Assurance Intern | Beijing Youxuan Software

May 2019 - Aug 2019

- Resolved tickets for a cross-platform office administration application using Java, JavaScript, and Spring MVC
- Represented the QA team to conduct integration and functional testing

## Projects

### AutoScribe

Sep 2019 - Dec 2019

- Developed a whiteboard writer that translates whiteboard drawings to a desktop image on an application via strings and encoders
- Used Python to interpret encoder rotation as polar coordinates
- Designed marker sleeve to attach to strings and string spooling device to keep in constant tension

## Education

### BASc in Biomedical Mechanical Engineering and BSc in Computing Technology

University of Ottawa

2018 - Anticipated 2023

3rd year, 3.7 GPA

## Awards

**2019, 2020** | Dean's Merit Scholarship

**2019, 2020** | uOttawa Engineering Competition: Junior Design 1<sup>st</sup> Place

**2019** | Biobuddy Design Competition: 3rd Place

## Tools

### Languages

English

French (Working language)

Mandarin (Comprehension)

### Mechanical

SolidWorks

AutoCAD

Finite Element Analysis (FEA)

Computational Fluid Dynamics

### Software

Java

Python

C++

MATLAB/Simulink

Maple

LaTeX

Git

Arduino

Microsoft Office Suite