

# William Mui

3<sup>rd</sup> Year Mechatronics Engineering

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## SKILLS

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### Languages

Java • JavaScript • Python • C++ • C

### Frameworks

Node.js • Express.js • React.js

### Databases

MongoDB • Cassandra

### Cloud & DevOps

Docker • Heroku • Jenkins • Gradle

## EXPERIENCE

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### BlackBerry

Ottawa, ON

Software Development Student, Backend

May 2020 – August 2020

- Developed a multithreaded **OAuth2/OpenID** SDK in **Java**, facilitating communication between the RP/client and IDP
- Spearheaded the SDK architecture and provided extensive documentation and demos to external teams
- Updated **REST APIs** in **Express.js** to handle the creation and persistence of tenant users in a **Cassandra** database
- Wrote isolated unit tests using **JUnit** by mocking external API and service dependencies using **Mockito**
- Created a CI/CD pipeline in **GitLab** to build and test a **Gradle** project using an external JDK **Docker** image

### Infor

Toronto, ON

Software Developer, Backend

September 2019 – December 2019

- Reduced setup times for Infor's WFM web app by 70% by developing a **Docker** container for its **WebLogic** server
- Created a **Java** tool to track and log open JDBC connections across the WFM project using AOP principles
- Wrote comprehensive test scripts in **Groovy** used within a **Jenkins** pipeline, achieving 90% code coverage
- Utilized Apache **Maven** to build and manage Java projects and **TortoiseSVN** for version control of **Jira** tasks

### Deep Trekker

Kitchener, ON

Full Stack Developer

January 2019 – April 2019

- Developed a modular frontend for an underwater ROV controller using **QML**, reducing the codebase size by 40%
- Handled incoming embedded commands from the ROV to the controller using **C++** in a **Qt** environment
- Prepared and tested key features for the DTG3 product release at an international trade show (Ocean Business 2019)

### Agriculture and Agri-Food Canada

Ottawa, ON

Web Analyst

May 2018 – August 2018

- Led the design and implementation of a responsive charity campaign website using **JavaScript**, HTML and CSS
- Delivered ongoing IT support to clients operating within an external **SharePoint** environment

## PROJECTS

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### Spotify Playlist Generator

React.js, Node.js, Express.js, MongoDB, Heroku

July 2020 – August 2020

- Developed a **React.js** app hosted on **Heroku** to help Spotify users organize their music with genre-specific playlists
- Built a **REST API** using **Express.js** to fetch data from Spotify's Web API and run algorithms to sort a user's library
- Implemented **OAuth2** with sessions to handle encrypted tokens with a **MongoDB** database deployed on **AWS**

## EDUCATION

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### University of Waterloo

Candidate for BAsC, Honours Mechatronics Engineering, Co-op

September 2017 – April 2022