

# James McDonald

## Aspiring Software Engineer

### About Me

I am a self-motivated Computer Engineering student who enjoys working in dynamic environments. I would like to use my software development expertise to contribute to a project that will significantly impact and improve the lives of Canadians. As I wrap-up my professional internship year, I am seeking to join a new company for the summer of 2020 before I return to school and finish my degree.

### Summary of Skills

- 3+ years of computer programming experience
- Languages/Frameworks:
  - Advanced - **C, Java, SQL**
  - Proficient - **C++, JavaScript, React**
  - Prior Experience - **C#, Flutter, Python, Node**
- Experience working with **agile development** and **Git**
- Strong communication and collaboration learned through 5+ years of customer service and team work
- Skilled in design thinking and creative problem-solving

### Project Portfolio

#### Cube Solver

- Full stack web application which returns instructions to solve a *Rubik's Cube* based on the given state
- Created an API backend using **Java** and **Spring Boot**
- Implemented interactive frontend using **React**
- Learned about project management through independent development

#### ProForm






- Mobile application which analyzes user's squat form and provides helpful feedback
- Developed application using **Flutter** and **Figma**
- Added user accounts and data storage using **Firebase**
- Completed at a *hackathon* which enhanced collaborative development and time management skills

A complete list of my project work can found at:  
[jamesgmcdonald.com](http://jamesgmcdonald.com)

### Community Involvement

- *Hacktoberfest 2019* - Contributor and Maintainer
- *Hack the North 2019* - Participant
- *QHacks 2019* - Participant
- *Queen's Local Hack Day 2018* - Participant

### Contact Info

 Aurora, ON  
 [jamesgmcdonald.com](mailto:jamesgmcdonald.com)  
 [james.mcdonald@queensu.ca](mailto:james.mcdonald@queensu.ca)  
 [github.com/jmcdonald](https://github.com/jmcdonald)  
 [linkedin.com/in/jamesgregorymcdonald](https://www.linkedin.com/in/jamesgregorymcdonald)

### Education

#### Queen's University

Bachelor of Applied Science (B.A.Sc.) - Computer Engineering

- Graduating class of 2021
- In-major GPA of **3.6/4.3**
- Dean's List Scholar 2017-2018 and 2018-2019
- Highlight courses: **AI and Interactive Systems, Database Management Systems, Data Structures, Fundamentals of Software Development**
- Involvement: Engineering Orientation Week Volunteer and Teaching Assistant for *Electrical Circuits and Machines*

### Professional Experience

#### Full Stack Developer

Statistics Canada, Ottawa ON

May 2019 - Present (completing internship April 2020)

- Developing internal web application with over 35,000 users which is mainly used for managing employees and collecting survey responses
- Used **Java** and **SQL** to restrict service request access to specific survey types and operations in order to eliminate the possibility of errors
- Used **Javascript** and **JQuery** to implement hotkey functions that will greatly reduce Carpal Tunnel Syndrome in field employees
- Exposure with technologies such as **Apache Struts, JavaBeans, Liquibase, JPA, JUnit Testing** and **Spring**

#### Software QA Analyst Intern

Longo's Grocery, Klienberg ON

May 2018 - August 2018

- Assisted in company's transformation of vendor ordering and distribution center operations to make better use of technology
- Wrote and executed testing scripts to ensure that various applications aligned with company's business requirements before their integration
- Conducted testing sessions with internal and external stakeholders - used feedback to request software and process adjustments until approved

### Volunteer Experience

#### Electronics Engineer

Queen's Hyperloop Design Team, Kingston ON

September 2018 - July 2019

- Worked on an engineering design team to build a scale replica of a *Hyperloop* pod to be entered in the global *SpaceX Hyperloop* Competition
- One of 21 teams out of 1,500 applicants to be invited to the final-round
- Researched and selected pressure and IMU sensors for monitoring and maintaining the safety of the pod
- Prepared technical documentation of electrical components and how they integrate with the pod for each of the 4 documents submitted during the competition application process