

# James McDonald

## Passionate Software Developer

### About Me

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. I am a self-motivated Computer Engineering student who is always open to developing with new technologies.

### Summary of Skills

- 3+ years of computer programming experience
- Languages: **Java**, **C**, **SQL**, **C++**, **JavaScript**, **Python**
- Frameworks: **React**, **Node**, **Flutter**, **React Native**
- Experience working with **agile development** and **Git**
- Strong communication and collaboration
- Skilled in design thinking and creative problem-solving

### Projects

#### 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

#### Workout Helper

- Website used to plan workouts with the 5/3/1 schema
- Frontend created with **JavaScript**, **React** and **Bootstrap**
- Backend created with **Node**, **Express** and **MongoDB**
- Gained experience with designing frontend layouts and with creating server-side operations

Full portfolio viewable at:  
[jamesgmcdonald.com](http://jamesgmcdonald.com)

### Community Involvement

- CUSEC 2020 - Delegate
- Hacktoberfest 2019 - Contributor and Maintainer
- Hack the North 2019 - Participant
- QHacks 2019 - Participant

### Contact Info



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### Education

#### Queen's University

Bachelor of Applied Science (B.A.Sc.) - Computer Engineering  
2016 - Present (Expected Graduation in May 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 in April 2020*)

- Developing internal web application with over 35,000 users which is mainly used for managing employees and collecting survey responses
- Implemented logic to restrict service request access to specific cases using **Java** and **SQL** to eliminate the possibility of uncaught errors
- Built a set of system-wide hotkeys using **JavaScript** and **JQuery** that will greatly reduce Carpal Tunnel Syndrome in field-employees
- Created an **AJAX** API to enable the creation of survey relationships
- Exposure to technologies such as **Spring**, **JUnit**, **Apache Struts**, **Liquibase**

#### 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

### Extracurricular 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 the competition application process