# **Brent Champion**

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## **EDUCATION**

#### **Queen's University**

September 2017 – Present

Bachelor of Applied Science in Computer Engineering

Relevant Courses: Data Structures, Digital Systems, Electronics, Engineering Design and Practice

#### **Royal Conservatory of Music**

September 2006 – Present

Completed Conservatory Grade 10 for Piano in 2016 with First Class Honors Working toward Associate of the Royal Conservatory Diploma for 2020

# **SKILLS**

- Proficient with C, C++, Java, Python and MATLAB
- Experienced in developing algorithms
- Working knowledge of Microsoft Office
- Hard working, strong problem-solving abilities and self-driven learner
- Strong communication skills, written and verbal

# **EXPERIENCE**

# Englinks - Peer Tutor

April 2018 – Present

- Tutored 30+ first year students 1-on-1 in computer programming, calculus and physics
- Ran extensive course review workshops for groups of 60+ first year students
- Prepared course review workbooks for 400+ students

#### Lowes Canada - Warehouse Associate

May 2018 - August 2018

• Operated Heavy Machinery to organize, prepare and deliver complex orders

#### City of Mississauga - Lifeguard and Swimming Instructor

September 2015 – August 2017

- Taught swimming lessons to a variety of people, including toddlers, children with special needs and adults
- Gained hands-on experience dealing with emergency situations and being a first responder

#### Goodyear Select – Automotive Service Technician Apprenticeship

**January 2016 – July 2016** 

- Diagnosed and fixed diverse car problems. Learned proper use of machinery and general shop etiquette
- Gained a deeper understanding of the underlying systems in a car through building a model V8 engine

# RELEVANT EXTRACURRIULARS

### Queen's Formula SAE Design Team – Electrical Team

September 2017 – Present

- Experience designing wiring schematics, testing and developing PCB layouts for various electronic systems
- Developed a better data acquisition system and more effective ways to manage the car's electrical system
- Introduced an electronic throttle control system, helping the team achieve faster transient response times and opening new opportunities for software development
- Gained significant experience working through the process of submitting design proposals, following specific safety guidelines and thoroughly testing designs

#### **OMIND Summer Cohort**

May – August 2018

- Took part in a summer cohort education program focused on Machine Learning and Artificial Intelligence
- Gained experience applying complex concepts to develop efficient working Machine Learning algorithms

## Western Hacks V

November 2018

• Built and demoed an IoT system which uses API integration and Machine Learning to track a user's grocery shopping to alert them when their food is going bad. The goal was to reduce garbage and financial waste.

## **QHacks**

February 2019

• Designed a Machine Learning model which was then trained to play the classic "Snake" game. The algorithm and model were developed in Python, using frameworks such as TensorFlow and PyTorch.

## **CERTIFICATIONS**

• Queen's University McLaughlin Hall Machine Shop Training

October 2018

• National Lifeguard, Standard First Aid w/ CPR – C

**July 2015**