# **Mackenzie Chau**

Mechatronics Engineering Student

### **Skills**

#### Languages

 C++ // Java // Python // HTML // CSS // Javascript

#### Design

 AutoCad // SolidWorks // Freehand Sketching // GD&T

#### Tools

• Git // Microsoft Office Suite

## **Education**

#### University of Waterloo

BASc in Mechatronics Engineering Sept 2018 - Present

#### **Relevant Courses**

- Data Structures and Algorithms
- Microprocessors and Digital Logic

## **Achievements**

## President's Scholarship of Distinction

 Awarded by University of Waterloo to students with an entrance average over 95%

#### AAA Hockey Player 2011-2018

- One of top 32 out of 300+ players selected to compete in AAA GTHL Midget All Star game (2018)
- 5x GTHL (Greater Toronto Hockey League) AAA Champions (2012 - 2016)
- 2x Ontario Champions at provincial hockey tournament (2013, 2015)

## **Interests**

#### Ultimate Frisbee

 Currently playing on the University of Waterloo Varsity Team and competed at Nationals

#### Self-taught Barber

 Cuts hair for clients on a weekly basis, while managing own clientele

#### **Fitness**

 Follows a 5-day split workout schedule of 7.5 hours a week, while managing a clean and healthy diet

#### Golf, Skiing, Fashion, Travelling

## Experience

**Castlebridge Development • Project Management and Electrical Intern** May 2019 - Toronto, ON Aug 2019

- Designed preliminary drawings for the 2nd largest development project in the Waterloo Region, a 300+ unit condo site, using AutoCad
- Managed multiples sites making regular visits and building strong relationships with workers
- Assisted head electrician with installing and testing electrical power, communications, lighting, and control systems

## World Class Hockey • Skills Coaching Assistant Toronto, ON

Sept 2017 -Sept 2018

- Developed creative and enjoyable training sessions which enhanced the development of fundamental hockey skills for over 20 students
  - Instilled determination among students through positive communication, constructive feedback, and encouragement

## **Projects**

2018

#### Personal Website

- Developed my own personal website using HTML, CSS, and Javascript: http://www.mackenziechau.gq/
- Currently working on the second version of my website aiming to improve functionality with Javascript

#### **Skittles Sorter Robot**

- Collaborated with teammates to design and build a successful robot that was able to autonomously distinguish between and sort Skittles by colour
- Constructed robot using Lego Mindstorms EV3 Kit and custom-made 3D parts through the aid of well-planned hand-sketched and digital (AutoCAD) designs
- Programmed conveyor belt functionality using RobotC which moved Skittles in a smooth and well-timed manner

#### 3D Printed Phone Stand

- Designed and printed a 3D model of a functional phone stand using SolidWorks while meeting design requirements
- Includes a unique feature that provides space for the phone to be plugged in while the stand is in use

#### Tron Day Robot

 Built a remote controlled robot in less than 12 hours that is capable of picking up objects and precisely placing them on intended platforms