# NAITAO CUI

# **SKILLS**

**LANGUAGES:** C++, C, HTML, CSS, Javascript **FRAMEWORKS:** jQuery, AngularJS, Ionic

**PLATFORMS:** Arduino

CAD: AutoDesk Eagle, SolidWorks, AutoCAD, Fusion 360

## **EMPLOYMENT**

## **Braze Mobility** · Product Development Intern

May 2017 to Aug 2017

- Introduced and implemented **C++** based library to reduce noise in rear-end detection system resulting in signicantly less faulty readings
- Re-engineered company code using **C** to incorporate a Data Logging System into Adafruit Feather Boards allowing for a much cleaner integration of mobile apps
- Developed a dynamic Google Sheets extension written in **HTML**, **CSS and JavaScript** to efficiently mass edit inventory data, reducing the average editing time from several minutes to a few seconds
- Designed a control module using **Fusion360** that was employed in company's beta product and later inspired final design

# **PROJECTS**

#### **Bot or Not**

- Developed an online Turing Test game where players are placed in a chat room and must determine which users among them are actually machines
- Architected game's backend flow using Node.Js and Express to support concurrency
- Designed and developed an interactive user interface using Jade, CSS and JavaScript

#### **Autonomous Table Tennis Trainer**

- Constructed autonomous robot to fire table tennis balls at custom distances and frequencies
- Developed and embedded C-based code to integrate personal ball loading design
- Designed 3-D printed and laser-cut components using **AutoCAD** and **SolidWorks** allowing for easy integration

#### **Weather Advisor**

- Employed public APIs using JavaScript to suggest appropriate clothing to wear depending on local weather
- Designed Web App using **HTML** and **CSS** to create an intuitive user interface

## **EDUCATION AND RELEVANT COURSES**

University of Waterloo · Candidate for Bachelor of Mechatronics Engineering, expected graduation in 2021

- Data Structures & Algorithms (C++, Abstract Data Types, Algorithm Design and Efficiency)
- Microprocessors and Digital Logic (PLC Programming, Microcomputer Structure and Operation)

### **AWARDS**

# **Professional Engineers of Ontario Scholarship**

Sep 2016

• Awarded to academically distinct students pursuing careers in engineering

# **President's Scholarship of Distinction**

Sep 2016

Granted to Waterloo applicants with an entrance average exceeding 95%