# **ALAN CHEN**

#### **OBJECTIVE**

I am seeking a full-time position that will allow me to learn more about the vast computer engineering field while making a difference in the world.

#### CONTACT

PHONE: 646-894-0553

Portfolio:

https://achen173.github.io/

GitHub:

https://github.com/achen173/

Email: alanchen@umass.edu

#### **HOBBIES**

FPV Drone Racing Skateboarding Fishing Tennis

#### **EDUCATION**

#### **University of Massachusetts Amherst**

Bachelor of Science in Computer Engineering Expect Graduation Date: May 2021

GPA: 3.5

### **SKILLS**

**Programming**: Python, Java, JavaScript, React, C, Assembly, **Software**: MATLAB, Linux, Atmel Studio, Web/App Development

Language: Chinese (Mandarin)

Others: Arduino, FPGA, Jetson Nano, Quartus, SPI, UART

#### **WORK EXPERIENCE**

## ECE 202 Computation Tools Tutor

Sept 2019 - Dec 2019

- Using MATLAB, Excel, and Python to design/visualize systems
- Emphasis on teaching students to use applications efficiently, with well-structured code and checks to find errors

#### UnitedHealth Group

Software Engineering Internship

June 2019 – August 2019

Utilized Graph Database, to build a dynamic website which provided unique insights about the huge amounts of data collected to reduce call volumes and routing/waiting time

#### **UnitedHealth Group**

Software Engineering Internship

June 2020 – August 2020

 Integrated Airship's push notification features and Apple HealthKit's data with an iOS app to increase user engagement

# **RESEARCH/PROJECTS**

#### **Election Security**

Sept 2018 - May 2019

- Utilize Little-JIL, a software used to build process models, to map out the election procedures in Massachusetts
- Processing the model using Fault Tree Analysis to find possible problems in the election system and looking for ways to improve
- Presented research to a class of 60 people

#### Cache Optimization in Assembly

Nov 2019

- Wrote machine learning (linear regression) and matrix multiplication in MIPS assembly language
- Optimizing Cache Performance using a Cache Simulator

# Object Detection from a Drone

July 2020

- Retrieved live feed from a drone to perform object detection using pre-trained neural networks
- Check here for pictures: https://github.com/achen173/DroneRx