# Ryan Chan

Email: RyanChanTech@gmail.com Website: www.RyanChanTech.com

#### **EDUCATION**

Cornell University, College of Engineering, Ithaca, NY

**Expected May 2023** 

Bachelor of Science, Electrical and Computer Engineering

3.82 - Cumulative GPA

**Relevant Courses:** Object-Oriented Programming & Data Structures (A-), Electromagnetism (A), Digital Logic & Computer Organization (A), Introduction to Circuits (Fall 2020, still have to finish a few labs in-person because I took semester remotely), Signals & Information (will take in Spring 2021), Embedded Systems (will take in Spring 2021)

**Honors/Awards:** Cornell Tradition Fellowship

#### **EXPERIENCES**

## Engineering World Health Project Team, Cornell University

Sept. 2020-Present

- On the electrical sub-team of a project team that develops technology-based health solutions for low-resource communities.
- Currently building a low-cost and non-invasive prosthetic arm control interface for a prosthetics company
  - o Designed most of the Printed Circuit Board (PCB) and wrote part of the software using C++

# Organic Robotics Lab, Cornell University

Jan. 2021-Present

- Recently joined a lab that conducts research in soft robotic technology
- Developing the high-voltage circuitry and code for electrohydraulic (HASEL) tentacle actuators

#### Cornell Makeathon, Cornell University

Feb. 2020

- Collaborated with a small team to build a magnetic, autonomous, and Bluetooth-connected whiteboard eraser robot
- Secured first place in the makeathon.

#### Cornell Dining, Cornell University

Jan.-Mar. 2020

• Learned to perform tasks and communicate efficiently in a fast-paced work environment.

## Financial Research, Quinnipiac University

2018-2019

- Used Python skills to help a professor at Quinnipiac University conduct financial research.
- Wrote a script that filters out bots in a dataset, a script that compares the similarity of patents, and a web scraper that downloads files from the US Securities and Exchange Commission website.

## PERSONAL PROJECTS (More on website)

# Tic-Tac-Toe on a Business Card

Dec. 2020-Present

• Currently developing a PCB business card that can play the classic game of tic-tac-toe using an ATMega Microcontroller

# **Personal Microcontroller**

Aug.-Sept. 2020

Developed microcontroller boards similar to Arduino boards, but with modifications to suit my own preferences.

#### **Gesture Controlled Lock**

Jul.-Aug. 2020

 Assembled and led a team over summer break to build a contact-less lock that uses basic hand gestures to enter the passcode to open a garage door

YouTube Channel 2016-2020

- Post videos of some personal electronic projects and tutorials.
- Have accumulated over 90k total views and have had some projects featured on Arduino social media and Hackaday

## SPECIALIZED SKILLS

Coding: Python, Java, Arduino, C/C++, JavaScript, Verilog, HTML/CSS

CAD: PCB Design (Autodesk EAGLE, Altium Designer), 3D Design (Autodesk Fusion 360)

**Others:** Git, Adobe After Effects