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
Cornell Tradition Fellow
3.707 Cumulative GPA

Relevant Courses*:* Object-Oriented Programming & Data Structures (A-), Electromagnetism (A), Digital Logic & Computer Organization (A), Circuits (B+), Signals & Information (A-), Embedded Systems (A), Designing with Microcontrollers (taking now), Discrete Structures (taking now), Intelligent Physical Systems (taking now), Electromagnetic Fields & Waves (taking now)

EXPERIENCES

Cornell Engineering World Health (EWH) Project Team **Sept. 2020-Present**

- On the electrical sub-team of a project team that develops health solutions for low-resource communities during school year
- Helped build a low-cost and non-invasive prosthetic sEMG arm control interface in partnership with Invictus BCI
    - Was in charge of Printed Circuit Board (PCB) design and wrote part of the software using C++

Invictus BCI Inc. **June 2021-August 2021**

- Continued work on prosthetic sEMG armband control interface from EWH as a full-time intern over the Summer
- Was the lead of the sEMG armband team, leading a team of three. Also did most of the PCB design for the armband

Cornell Organic Robotics Lab **Jan. 2021-Present**

- In a lab that conducts research in soft robotic technology during the school year
- Helped develop and test the high-voltage circuitry and code for electrohydraulic (HASEL) tentacle actuators
- Currently working on using high speed fiber optics as flexible sensors

B.C. Children's Hospital Research Institute **June 2021-Present**

- Volunteered over the Summer to help develop electronics for an infant transportation device to be used in Malawi, Africa

Cornell Dining **Jan.-Mar. 2020**

- Was in charge of beverage stations. Learned to perform tasks and communicate efficiently in a fast-paced work environment.

Financial Research **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

Tic-Tac-Toe on a Business Card **Dec. 2020-Present**

- Developed a business card that can play the classic game of tic-tac-toe on a Printed Circuit Board

Gesture Controlled Lock **Jul.-Aug. 2020**

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

YouTube Channel **2016-2020**

- Post videos of some personal electronic projects and tutorials
- Have accumulated over 125k 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