ANTHONY FUNG

anthony.fung1999@gmail.com | 604-721-0280 | linkedin.com/in/anthony-fung29/

EDUCATION

University of Western Ontario **Sept. 2017 – Apr. 2022**

Bachelor of Engineering Science - Mechatronic Systems Engineering

- Awards: Dean's Honor List, NSERC Undergraduate Student Research Award ($10,000), Dean's Award research grant ($5625), Western Scholarship of Excellence ($2000), Highest grade in Advanced Digital Signal Processing (96%)

WORK EXPERIENCE

National Center for Audiology **May. 2022 – Aug. 2022**

Embedded Software Engineering Intern

- Currently developing Python programs on a Nvidia Jetson Nano that filters real-time audio input to simulate specific patients' hearing loss experience providing researchers with insight on proper development of hearing aids
- Prepared and presented audio data for spectral analysis, through MATLAB scripts and signal processing techniques
- Wrote MATLAB scripts to play and record audio signals from an anechoic chamber to test specifications and create a specification sheet for an experimental microphone

McCormick Canada **May. 2020 – Apr. 2021**

Manufacturing Engineering Intern

- Designed clear and detailed Lockout-Tagout instruction placards, for a newly constructed Ketchup production line, enforcing proper shut down of hazardous energy sources during maintenance on machines, saving 2 hours of training time per new plant employee
- Developed a PDF merging software tool using Python for ease of file management, saving 5 hours of labour time

University of Western Ontario **May. 2019 – Sept. 2019**

Undergraduate Research Assistant

- Built a wearable LED force level indicator which gave prosthetic users intuition of their gripping force, utilizing stereolithography, C++, and Arduino to improve the ability of the user to handle fragile objects

PROJECTS

Portfolio Website – *ReactJS, HTML5, CSS* **May. 2022 – present**

- Currently designing a responsive portfolio website that displays my technical projects to aid recruiters with more information on my skillset and experience in addition to this resume

Package Protective Safe – *Arduino, ESP8266 WiFi Module* **Sept. 2021 – Apr. 2022**

- Led a team of 4 engineering students to design an internet capable safe that protects delivered packages from theft
- Automated the device to connect to a local network using Arduino's serial communication and a WiFi module
- Programmed the device to interact with a JSON API to allow users to receive notifications when packages arrive, to see the states of sensors, and to lock and unlock the device, through a web application
- Designed and built a space-efficient, crank-slider door mechanism to drop packages into the collection compartment

Coursework Organizer – *Python, Flask-SQLAlchemy, HTML5, CSS* **Oct. 2021 – Nov. 2021**

- Designed a Flask-based web application that manages tasks and deadlines, improving an individual or team's workflow and time management
- Implemented an intuitive user interface with HTML5 and CSS, that works with an object relational mapper to allow users to create, read, update and delete user-specified data

Space Shooter – *Python, Pygame* **Dec. 2020 – Jan. 2021**

- Developed a 2D Space Shooter inspired game using the Pygame module, with varying levels of difficulty, different enemy types, and power-up features, with over 50 unique users
- Converted program into an executable that can be downloadable and played on different computers

SKILLS

Languages and Frameworks: Python, C++, MATLAB, Flask, HTML5, CSS, ReactJS

Technical Skills: SolidWorks, AutoCAD, Arduino, Image processing, Signal Processing, PLC ladder logic, 3D printing, Soldering