THE UNIVERSITY OF BRITISH COLUMBIA

Engineering Co-op Program   Phone (604) 822-3022
Faculty of Applied Science   Fax (604) 822-3449
2385 East Mall   eng.coop@ubc.ca
Vancouver, BC Canada V6T 1Z4   www.ubcengineeringcoop.com

Jasper Chan

Windsor Court, Richmond, British Columbia, V6V 2W6
Email: jasper.chan@alumni.ubc.ca
Phone: (778) 848-3610
Github: Gigahawk

Technical Skills

Tools: Oscilloscope • Signal Generator • Multimeter • Soldering Iron • Arduino • CircuitPython/MicroPython
Languages: C/C++ • Python • Dart/Flutter • JavaScript/Node.js • Java • MATLAB
Software: SOLIDWORKS • Inventor • Git • Linux • Vim

Academic & Co-op Status

Academic Program:
- Mechatronics Engineering; 5 of 8 academic terms completed;
- Anticipated date of graduation: May 2021

Co-op Status
- Completed 2/5 Work terms; available for 4 or 8 beginning September 2019

Co-op Work Experience

Sierra Wireless   May 2019 – August 2019
Integration Engineer Co-op
- Built and extended test infrastructure to streamline automatic and manual tests
- Built a database to store and serve test metrics for individual firmware builds over a REST API

Precision Nanosystems   September 2018 – December 2018
Instrumentation Engineer Co-op
- Designed and built equipment to run experiments on microfluidics devices
- Wrote reports documenting the results of microfluidics experiments

Technical Projects

Low Waste Tangential Flow Filtration   November 2018 – December 2018
- Built a device similar to the KR2*i* TFF System
- Uses two syringe pumps connected directly to the filter instead of a peristaltic pump to reduce material lost due to tubing.
- Each syringe pump is capable of determining the volume of fluid contained within a syringe and allows for a user to specify a specific concentration ratio.

ASDS 2.x Sea-based Landing Pad Scale Prototype   January 2018
- Working with a group of 6 other students, worked through a formal engineering design process to build a boat capable of balancing and transporting model rockets
- Implemented a battery monitoring system to limit throttle based on power output, improving stability by preventing motor brownouts that would cause the boat to rock
- Wrote a class to remap controller inputs to a more intuitive control scheme allowing for greater control.

BM Bot   January 2018
- Working with a group of 3 other friends, built a Discord bot using Node.js that would track user's League of Legends games
- Used the Riot Games API to detect when a user finished their game, and then would send messages to the user poking fun at them based on their performance

Student Teams

UBC Orbit - ADCS
September 2018 – Present
- Orbit is building a cubesat for the Canadian Satellite Design Challenge
- The Attitude Determination and Control subteam is designing a system that will allow the cubesat to localize itself while in orbit and reorient itself as necessary

UBC Rapid
October 2016 – Present
- Specializes in advancing rapid prototyping technologies, especially 3D printing
- Currently running cheapest 3D printing service on campus

Volunteer Work Experience

Richmond 19th
September 2012 – Present
Scout Leader
- Plan and run engaging programs every week for youth aged 8-10
- Teach survival and life skills at camping trips, fostering an appreciation for the outdoors

Education

The University of British Columbia
Expected May 2021
Bachelor of Applied Science – Mechanical Engineering

Udemy
2018
Certified Scratch Programmer

Activities and Interests

- Billiards – summer leagues
- Sports – Ultimate Frisbee, snowboarding