Engineering Co-op Program Faculty of Applied Science 2385 East Mall

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## **Jasper Chan**

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#### **Technical Skills**

#### **Electrical Equipment Programming Languages** Software Oscilloscope C SOLIDWORKS • Signal Generator Python Inventor Multimeter JavaScript EAGLE Soldering Iron Java • Perfboard/breadboard MATLAB • Linux (multiple distros) Qt/QML Vim • C#

#### **Academic & Co-op Status**

Academic Program:	<ul> <li>Mechanical Engineering; 3 of 8 academic terms completed;</li> <li>Anticipated date of graduation: May, 2020</li> </ul>
Co-op Status	ullet Completed 0/5 Work terms; available for 4 or 8 beginning January, 2018

#### **Technical Projects**

#### **Custom 3D Printer** December 2016 - Present

- Lead a team of 5 in building an i3 based 3D printer
- · Designed custom mounting solutions to enable compatibility with readily available parts
- · Added a servo actuated pen to the printhead, allowing for multicolor prints without swapping filaments

#### 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 mobile floating platform capable of balancing and transporting model rockets
- Implemented a battery monitoring system that would limit throttle based on available power output, improving stability by preventing motor brownouts that would cause the boat to rock
- Remapped controller inputs to a more intuitive control scheme, allowing for effective piloting without practice

#### Offline Transit App

June 2017 - Present

- Wrote a Python script to scrape the Translink API for every bus stop and corresponding routes into an SQLite
- Built an Android app using the database that shows the user nearby bus stops with buttons to query individual bus times

#### **Automated Quoting Service Prototype**

October 2017 - Present

- Wrote a Python program that would automatically generate price quotes whenever a user submitted a job to UBC Rapid's printing service, reducing quote times from up to 48 hours down to 10 minutes
- Leveraged multiple Google APIs to access Google Forms data

#### **Student Teams**

#### **UBC** Rapid

October 2016 - Present

- Team specializing in advancing rapid prototyping technologies, especially 3D printing
- Currently running cheapest 3D printing service on campus

#### **Other Work Experience**

## Hamilton Kumon (Richmond, BC)

September, 2015 - February, 2016

#### Tutor/Marker

- Created a personal system to mark students' worksheets in an efficient manner
- Taught children mathematics and English at various levels in a friendly way that encouraged self-growth

### **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 Bachelor of Applied Science – Mechanical Engineering

**Expected May 2021** 

#### **Activities and Intrests**

- Billiards summer leagues
- Sports Ultimate Frisbee, snowboarding