Yi Lin Liu

**3rd year Engineering Physics**

## Skills Summary

* CAD skills with SolidWorks and On Shape.
* Machine shop experience.
* Programming skills: C++, Java, R, Matlab
* Electronics: Oscilloscope, DMM, Circuit Construction and analysis
* Soft Skills: Energetic, Dedicated, Organized.

## Technical Projects/ Lab Experiences

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| **NRC-DAC( Data Analysis Center)** | **Feb 2017-May 2017** |
| * Investigated various web APIS (Google Maps, Flickr, Facebook and Twitter) through R and its relevance to data mining. * Compiled concise summary of key findings as well as documentation report. * Went beyond expectation by using explored APIs and R packages to prepare for projects by standardizing raw addresses, exploring weather trends and visualizing density clutters. | |
| **ENPH Summer Robot Course** | **May 2017-August 2017** |

* Along with team of 4, designed fully autonomous robot capable of tape following, agent retrieval and ziplined delivery. **Scoring 1st place during competition.**
* Designed all mechanical aspects using 3D modelling software Onshape and manufactured using 3D printer, laser cutter and water jetting.
* Constructed finite state machine responsible for navigating robot through the competition surface. Collaborated with teammates using GitHub.
* Designed website for robot documentation.

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| **SUBC (UBC’s Submarine Team)** | **Sep 2016-Present** |

* Assisted in the design of linear gear box, testing and installation.
* Basic machining such as drilling, tapping, filling and sanding.
* Awarded the “eager bagger” title for enthusiasm, participation and willingness to assist in tasks.
* Design and testing of internal frame as this year’s major assignment.

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| **EWB Fairtrade volunteer and Venture Lead (UBC-Vancouver)** | **Sep 2015-Present** |
| * Responsible for leading Fairtrade Venture in the upcoming year, including year planning, member recruitment, event planning and communication with president, other venture leads and sponsors. * Planned the fair-trade campus week and gathered sponsorship, resulting in over 300 attendees. | |