YiLin Liu

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# Skills Summary

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| * 40 hour machine shop training course using drill press, lathes and mills * Rapid Prototyping using laser cutters, water jet cutter and 3D printers * Construction and debugging of circuit boards using soldering iron, Digital multimeter and Oscilloscope * MATLAB, C++, Java, R, and Python |

# Technical Experiences

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| --- | --- |
| National Research Council- Data Analytics Center Data Scientist Co-op | Feb 2017-May 2017 |
| * Tested social media web APIs for availability of data using R to provide recommendations for future research * Exceeded deadlines by completing designated investigations within the first 2 month * Exceeded expectations by standardizing addresses and producing interactive density map for machine learning predictions on shipment addresses using JSON, Google Maps API and Overleaf * Minimized Manuel Data collection by writing R script to scrap weather website for updated weather conditions | |

# Technical projects

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| --- | --- |
| **ENPH Robot Competition**  ENPH253: Introduction to Instrument Design | Summer 2017 |
| * We built and raced an autonomous robot capable of navigation around a obstacle course, retrieve animals and delivery using zip line. * Scored 1st place during robot race with fellow class mates * Implemented and designed both the hardware and software for chassis, retrieval system and zip line system | |
| **UBC’s Submarine Team (SUBC)**  Frame Sub-Team Co-Lead | **Sep 2016-Present** |
| * Manage testing and design of aluminum internal frame to improve mechanical stability of mounting and resolve accessibility issues of the hull * Implemented MATLAB code to generate propeller blade curves and airfoil profiles to simplify 3D design * Will 3D print propellers for testing, analyze test results and construct final propeller from carbon fiber composites * Basic machining such as drilling, tapping, filling and sanding to shape mounts and ensure correct mating of components | |

# Education

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| --- | --- |
| University of British Columbia **Bachelor of Applied Science,** Engineering Physics | May 2020 |
| * Dean’s Honour List since 1st year * Outstanding International Student Award, Trek Excellence Scholarship and Applied Science International Student Scholarship | |

# Hobbies:

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| --- | --- |
| **EWB Fairtrade volunteer and Venture Lead (UBC-Vancouver)** | **Sep 2015-December 2017** |
| * Planned Fairtrade campus week and made over 500 student’s day by giving pancakes, free goodies and cheerful encouragement on life | |
| **Beginner Baker:** | |
| * Banana bread for bake sale which sold out in the first 30 minutes, raising a net profit of 30 dollars for 15 slices of banana bread * Lemon loaf which was devoured by roommates in a span of 30 minutes | |

Rewriting Resume Content

List of all projects

* Automnous claw from 1st year,
* Cardboard chair from 1st year
* CPEN 221 mini-projects: survival simulation, graphs and stuff
* Work Term experience at NS
* Robot Course
* Design Team
  + Frame
  + Propeller code
  + Cading of Propellers
  + Micellenous stuff

Skill Summary: