YiLin Liu 1

3rd Year Engineering Physics 2

# 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 to manufacture parts * Using oscilloscope and multimeter to debug circuits * Soldering to construct circuit boards * MATLAB, C++, Java, R and Python |

# Technical Projects/ Experiences

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| --- | --- |
| **National Research Council**  *Data Analyst Intern 3* | **Feb. 2017-May 2017** |
| * Tested web APIs for availability of data pertaining to general population using R * Performed preliminary data analysis for shipment prediction project using over leaf package and google API * Used Markdown and git to document summaries and key findings 4 | |
| **ENPH 253: Course Name Summer Robot Course** | **May 2017-Aug. 2017** |
| * Designed and built a fully autonomous tape-following robot capable of navigating an obstacle course to retrieve toys from a tub and deliver the toys down a zipline in groups of 4 students * Won 1st place during competition among 16 teams * Implemented and designed both the hardware and software for chassis, retrieval system and zip line system 5 | |
| **UBC Submarine Engineering Student Team (SUBC)**  *Sub-team Co-Lead* | **Sept. 2016-Present** |
| * Managed 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 for easy CAD design * Will 3D print propellers for testing, analyze test results and construct final propeller from carbon fiber * Basic machining such as drilling, tapping, filling and sanding to shape mounts and ensure correct mating of components | |

# Hobbies:

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| --- | --- |
| **EWB Fairtrade volunteer and Venture Lead (UBC-Vancouver)** | **Sep 2015-Present** |
| * 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 * Planning on expanding baking skills by making cookies, muffins, and ultimately a beautiful, fluffy soufflé | |

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: