



YILIN LIU
3rd Year Engineering Physics

SKILLS SUMMARY

- 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

National Research Council

Feb 2017-May 2017

CO-OP Student

- 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

ENPH Summer Robot Course

May 2017-August 2017

- Designed and built a fully autonomous robot capable of following tape to navigate obstacle course, retrieve toys from a tub and delivering the toys down a zipline
- 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

SUBC (UBC's Submarine Team)

Sep 2016-Present

Sub-team Co-Lead

- 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 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:

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

- Autonomous 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: