# YILIN LIU

3<sup>rd</sup> Year Engineering Physics Energetic, Dedicated, Organized

## SKILLS SUMMARY

Mechanical	Programming	Electronics	Others
SolidWorks	C++	Oscilloscope	Speaking mandarin
OnShape	Java	Multimeter	Event planning
Machine Shop training	R	Soldering	
Rapid Prototyping (3D	MATLAB	Circuit Analysis and	
printer, laser cutter, water		Debugging	
jetting)		Signal and systems analysis	

# TECHNICAL PROJECTS/ EXPERIENCES

# NRC-DAC (Data Analysis Center)

CO-OP Student

- Explored web APIs (Facebook, Twitter, Google, etc.) through R packages
- Used Markdown and git to document summaries and key findings
- Standardized raw addresses, visualized density clusters and scrapped data from the web for industrial projects

#### **ENPH Summer Robot Course**

May 2017-August 2017

Feb 2017-May 2017

- **Scored 1<sup>st</sup> place** racing a fully autonomous robot
- Designed claw, zipline delivery system, and chassis using *OnShape* and manufactured using 3D printer, laser cutter and water jetting
- Implemented finite state machine for robot firmware resulting in robot scoring perfectly in every run during competition

## **SUBC (UBC's Submarine Team)**

Sep 2016-Present

Sub-team Co-Lead

- Design and testing of aluminum internal frame as one of the co-leads this year
- Design and testing of propellers as part of the propellers team this year
- Assisted in the design of linear gear box, testing and installation
- 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

- 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 resulting in over 300 attendees and 2 companies hosting events on campus

Beginner Baker: Banana bread and Lemon Loaf