

# YILIN LIU

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

## SKILLS SUMMARY

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

## TECHNICAL PROJECTS/ EXPERIENCES

<b>NRC-DAC (Data Analysis Center)</b> <i>CO-OP Student</i>	<b>Feb 2017-May 2017</b>
<ul style="list-style-type: none"> <li>Explored web APIs (Facebook, Twitter, Google, etc.) through R packages to evaluate usefulness for data collection</li> <li>Used Markdown and git to document summaries and key findings</li> <li>Standardized raw addresses, visualized density clusters and scrapped data from the web for industrial projects</li> </ul>	
<b>ENPH Summer Robot Course</b>	<b>May 2017-August 2017</b>
<ul style="list-style-type: none"> <li><b>Scored 1<sup>st</sup> place</b> racing a fully autonomous robot</li> <li>Designed claw, zipline delivery system, and chassis using <i>OnShape</i> and manufactured using 3D printer, laser cutter and water jetting</li> <li>Implemented finite state machine using Arduino for robot firmware resulting in robot scoring perfectly in every run during competition</li> <li>Constructed and maintained the 2<sup>nd</sup> working H-bridge for our robot</li> </ul>	
<b>SUBC (UBC's Submarine Team)</b> <i>Sub-team Co-Lead</i>	<b>Sep 2016-Present</b>
<ul style="list-style-type: none"> <li>Design and testing of aluminum internal frame as one of the co-leads this year to ensure mounting of mechanical parts independent of the hull</li> <li>Design and testing of propellers as part of the propellers team this year. Constructed rough propellers for cost estimates, research into potential propellers and coating substances.</li> <li>Assisted in the design of linear gear box, testing and installation</li> <li>Basic machining such as drilling, tapping, filling and sanding to shape mounts and ensure correct mating of components</li> </ul>	

## HOBBIES:

<b>EWB Fairtrade volunteer and Venture Lead (UBC-Vancouver)</b>	<b>Sep 2015-Present</b>
<ul style="list-style-type: none"> <li>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</li> <li>Planned the fair-trade campus week resulting in over 300 attendees and 2 companies hosting events on campus</li> </ul>	
<b>Beginner Baker:</b> Banana bread and Lemon Loaf	