Lisa Li

3rd Year Electrical Engineering | 1735 E. 29th Ave Vancouver, BC V5N2Y8 | l.li@alumni.ubc.ca | (778)984-8481

EDUCATION

University of British Columbia — **September, 2015 – May 2020**
Bachelors of Applied Science – Electrical Engineering

Udemy
Supplemental courses (Linux Shell Scripting, Intermediate C#)

WORK EXPERIENCE

Rokstad Power (Coquitlam, BC) — **October, 2016 – August, 2017**
Technical Estimation Intern

- Aided senior estimators in bidding 10 major projects and several minor projects (sometimes workings on several at once) over the span of 10 months and winning two multimillion-dollar projects
- Created Excel sheets with a graphical user interface (GUI) for distribution line quality control that increased the entire QA process by 75%

Landyachtz Longboards (Vancouver, BC) — **July, 2014 – September, 2015**
Embedded Systems Intern

- Conducted case studies on forged metal longboard components and analyzed data in MS Excel to create benchmarks for manufacturer quality that resulted in 30% increase in axle strength
- Replaced mechanical sensors with electronic sensors in test equipment that decreased total time to test by 50%

TECHNICAL PROJECTS

Verilog Testbench Parser (Python) — **November, 2018**

- Wrote a Python script to read and parse a SystemVerilog files to create a test bench skeleton for specified SystemVerilog file
- Used Regex to parse the SystemVerilog files
- Increased efficiency and reduced minor but time-consuming bugs in resulting test benches

Laser Light Show (Motor Control Systems/ Embedded Systems Project) — **January, 2018-March, 2018**

- Designed and Built from scratch a 2-DOF (degrees of freedom) spherical wrist that includes two mechanically commutated, permanent magnet DC actuators that could draw lines, ellipses and a ghost shape
- Researched, designed, 3D modelled, 3D printed and then refining the design (Housing, core, commutators, brushes…etc.) according to results
- Unique features included temperature controlled cooling fans for current drivers, custom housing for electronics and motor homing system.
- Worked with controls team to integrate parts for final presentation where we placed first in the class competition

Heartrate monitor (Embedded Systems Project) — **January, 2016**

- Used the principles of photoplethysmography (PPG) to create a heart rate monitor
- Built an amplifier and high pass filter circuit to refine the signal before passing to the F38x microcontroller
- Used interrupts to process signals to find heart rate in beats per minute

TECHNICAL SKILLS

Prototyping
- 3D Printing
- Laser engraving/Laser cutting
- Arc welding
- Basic hand tools
- Lathe
- Arduino IDE

Computer
- C/C++/C#
- Python
- Bash
- Altium
- Visual Studio
- AutoCAD/SolidWorks

Electrical Equipment
- Soldering iron
- Oscilloscope
- Signal generator
- Multimeter
- Breadboarding
- LabView

HOBBIES

Team Sports

Youth Coaching

Skateboarding/ Longboarding