

# Brandon Zhu

Bachelors in Electrical, Co-op Option | Carleton University | September 2014 - Present | brandonlucaszhu@gmail.com

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## **RELEVANT SKILLS AND EXPERIENCES**

### **Technical Skills**

- Knowledgeable in creating and simulating electrical circuits using PSpice to simulate and, OrCAD or LTSpice to design the virtual circuit
- Adept at working in a lab, utilizing equipment such as Function Generator, Digital Multi-meter and Oscilloscope and, handling analog circuit components (resistors, capacitors, inductors, diodes and, BJT/MOSFET)
- Experienced in CAD and Creo Parametric to create engineering designs in 2-D and 3-D
- Able to design and implement combinational/sequential digital logic circuits and synchronous/asynchronous finite state machines using Xilinx ISE and ModelSIM software
- Proficient in MATLAB with interpolating and regression graphing, and solving sophisticated calculations such as linear systems, numerical integration and numerical differentiation
- Writing technical reports and presentations utilizing Microsoft Word, PowerPoint and Excel
- Utilized operating systems: Mac and Windows

### **Communication**

- Acquired strong verbal, formal presentation, and active listening skills through school projects and work experience
- Actively striving to improve by seeking advice from peers and mentors
- Experienced in presenting informative and technical concepts clearly to an audience without any background knowledge
- Adept at collaborating and working with many individuals to accomplish technical projects
- Fluent in English and Cantonese

## **APPLIED PROJECTS**

### **Reverse Engineering Project:**

**September 2014 - December 2015**

- Redesigned and innovated the packaging of Apple Ear buds by elevating the packaging into a product for preserving untangled earphones cords making it eco-friendly by utilizing less materials and, providing an extra design to make it travel efficient
- Utilized IntelliCAD to create the blueprints of the design, built the design using Creo parametric and, produced the final product through a 3-D printer

### **Water Gathering Project:**

**May 2015 - June 2015**

- Provided a presentation on how to transform large amounts of desalinated water into drinkable water for individuals in third world countries
- Collaborated with others to design a large water way system to obtain desalinated water and convert it into fresh water

### **T-Bird Tail light circuit:**

**March 2016**

- Analyzed the circuits waveforms simulated on the software ModelSIM
- Replicated a T-Bird Tail light onto a programmable green logic board and, evaluated whether the LED's turned on in respect to the logic design

- Cooperated with another individual to design the T-Bird Tail light circuit on the program Xilinx ISE

## **VOLUNTEER EXPERIENCE**

### **IC Change: Ottawa, ON**

**October 2013 - June 2014**

- Fundraised to help third world countries in need of proper sanitation
- Responsible for obtaining and complete tasks required by the fundraiser leader

### **Kanata Tae Kwon Do: Ottawa, ON**

**September 2011 - June 2014**

- Supported the organization by teaching the basics of Tae Kwon Do to all age group
- Managed the dojo and properly organized martial art events

## **WORK EXPERIENCE**

### **Family Take-Out Restaurant Business**

- Learn to interact and resolve conflicts with customers
- Able to socially engage in conversations with confidence
- Adapt to working under pressure handling multiple phone lines when answering customer orders
- Have the ability to note down orders fast and use mental math to calculate them

### **Personal Electronics Business**

- Help individuals on designing and building a PC
- Repaired cracked phone screens