JOHN WEBSTER

Passionate about design.
Personable and professional.
Persistent in the face of adversity.

University of Waterloo
3A Mechatronics Engineering
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Technical Skills:

Hardware:

Microcontrollers

Simple Circuit Design

Soldering

Software:

C/C++

PLC Ladder Logic

Python

Git

Mechanical:

Solidworks

AutoCAD

3D Printing

CNC Machining

Carpentry

Highlights of Qualifications:

- Skilled with ***AutoCAD*** and ***Solidworks*** for analysis and design
- ***Design to manufacturing*** and ***project management*** experience
- Applied ***Arduino*** circuit design for test and DAQ in multiple environments
- Experienced in ***C++*** and ***PLC*** programming; learning ***Python*** and ***HTML5*** independently

Professional Experience:

Bendix Commercial Vehicle Systems LLC. (Sep 2017 – Present)

- Conducting HALT testing on ABS ECU's to advance research on the correlation between HALT results and expected service life of products in the field
- Designed and tested an improved timing circuit for a vehicle backup battery system

ZBoard, Intuitive Motion Inc. (Jan – Apr 2017)

- Optimized 3D printed part designs for more efficient installation and manufacturing
- Analyzed and proposed enhancements for key production and maintenance processes
- Team management experience gained from being shop manager for a week

DisplayPoint Manufacturing Inc. (May – Aug 2016)

- Developed strong management skills directing teams of ~20 workers packing rush orders
- Communication skills and professionalism built from purchasing and project proposals
- Independently prioritized many technical tasks day to day, completing them all in a timely manner, keeping detailed documentation of all work completed

Past Projects:

Electric Skateboard Dynamometer (ZBoard, Intuitive Motion Inc., Apr 2017):

- Designed and built an electric skateboard dyno run with Arduino for R&D and analysis purposes, capable of measuring the speed and power of any electric skateboard on today's market
- Developed an automated program to run and analyze power curves of motors, using Arduino and Excel

Noise Reduction Project (Displaypoint Manufacturing Inc., May – Aug 2016):

- Analyzed factory noise and produced cost effective solutions to target specific noise sources
- Designed and tested vacuum pump sound enclosures, acoustic panels, and barriers, which entailed Solidworks and AutoCAD design to manufacturing on CNC machines and thermal analysis

Steering Wheel Redesign (UW Mini Baja SAE Team, Dec 2016):

- Redesigned the wheel to be stronger and more ergonomic; manufactured by hand
- Analyzed designs using Solidworks FEA at a basic level

Activities & Interests:

Piano | Saxophone | Raspberry Pi | Travelling | Vlogging | Event Planning
Green Energy | Photography | Longboarding | Snowboarding | Soccer | Hockey