Gurshan Deol

Website: shawn-deol.github.io
Phone #: (289)-208-6976

QUALIFICATIONS

- Experienced in SolidWorks and AutoCAD design of plastic and metal parts
- Capable of using MATLAB and LabVIEW for testing purposes
- Experienced in the use of lab testing equipment (oscilloscopes, various transducers, etc)
- Intermediate profficiency in C, C++, Java and Javascript
- Ability to design U/I systems using VB.NET and RSView32
- Knowledgeable in the design of pneumatic systems

WORK EXPERIENCE

Ophardt Hygiene R&D, Beamsville, ON — Sep 2015 — Dec 2015

Product Engineering Intern

- Created a liquid level measuring device that was $200 cheaper than alternatives
- Designed both plastic and steel Solidworks components
- Designed and constructed the pilot version of a new pneumatic testing rig; using a modular valve manifold the new rig will be $5000 cheaper than the previous set-up
- Conducted motor efficiency testing to compare competitor products
- Performed cost estimation and generate bill of materials (BOM) for project assemblies

VASPAC, Hamilton, ON — Jan 2015 — Apr 2015

Systems Engineer Intern

- Developed scripts to display PLC data such as temperature and pressure using VB.NET
- Designed the operating console U/I in VB.NET, RSView32 and Archestra
- Translated electrical and mechanical drawings into easily readable electronics versions
- Simulated standard PLC operation using Matrikon OPC

Red Merle, Burlington, ON — May 2015 — Aug 2015

Design Intern

- Designed interactive web pages using Javascript
- Created web forms for clients to submit information using Adobe InDesign
- Researched and authored news blogs discussing various technical topics

EDUCATION

University of Waterloo — Sep 2013 — May 2018

Mechanical Engineering, Option in Biomechanics

- Specialzied option in Engineering Biomechanics
- Worked on projects in robotics and PLC programming with classmates
- Learned the use of specialized software such as Adams, MATLAB and RSView32

PROJECTS AND TEAMS

ATX to benchtop power supply

- Repurposed outdated desktop power supply as a variable benchtop power supply
- Learned power supply operating principles and gained experience in circuit design
- Finished project is able to supply 3.3V,5V and 12V independently

DVD-RW to laser etcher

- Repurposed outdated DVD-RW drives stepper motor assemblies and laser diodes
- Created a driver circuit for the laser diode and a wooden housing for the drives
- Tore down inkjet printers and DVD-RW drives to understand their mechanical assemblies

University of Waterloo Biomechatronics team

- Experimented with the use of coiled fishing line as a heat sensitive actuator
- Created a concept inrush current limiting circuit to protect sensitive electronics