

JAYSON BHARUCHI

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TECHNICAL SKILLS

Design:	Manual Drafting, AutoCAD, Inventor, SolidWorks, CATIA, Pro/E, Revit Architecture, Adobe Illustrator, Adobe Premiere Pro
Manufacturing:	3D printing, Milling, Lathe, CNC Machining, Welding, hardening, Sheet Metal Bending, Drill Pressing, Band sawing, Grinding, Tapping, and Filing, etc. Knowledge of Forging
Hardware:	Arduino, Optimized Circuit Design Configuration, Oscilloscope, Wave Form Generator
Programming:	HTML, CSS, jQuery, C, C++, MATLAB, VBA, CNC G-Code and M-Code
General Software:	Windows 2000 – Windows 8, Apple OSX, MS Word, MS Excel, MS Power Point, Android, and Apple iOS

PROJECTS

- Utilized the iterative design process to create a new concept mouse design which is currently in the works to be prototyped
 - Completed the design in SolidWorks
 - Utilized principles of human factors and ergonomics to design the outer shell
 - Programmed the internal hardware with an Arduino for testing basic mouse functionality (Low Fidelity Prototyping)
- Experienced in 3D Modelling of physical systems and devices with CAD software through high school and university robotics teams
- Designed and prototyped an automated plant watering system
 - Performed a stress analysis and flow simulation with SolidWorks
- Created a “Flappy Bird” game utilizing the Arduino, LED lights and Photo resistors
- Created a personal website to host my resume and portfolio utilizing HTML, CSS and jQuery

EXPERIENCE

Robotic Systems Engineer

Jan – May 2016

Retisoft Inc.

- Designed and optimized table and automated system layouts in SolidWorks, and ensured minimal robotic arm movement for maximal efficiency while ensuring a minimized system footprint
- Created system assembly 2D drawings, a bill of materials and technical specifications for each system
- Designed custom robotic arm “Gripper Fingers”, analyzed stress loads with the SolidWorks built in simulation software and created 2D drawings of the fingers utilizing GD&T methods for manufacturing

- Integrated the system designs onsite, installed all instrument drivers and taught the robotic arm to locate the microplate in each instruments standby transfer station positions
- Utilized the iterative design process to design a delidding instrument which used a vacuum pump to remove microplate lids

Technology Analyst

Sept – Dec 2014

Manulife Financial

- Completed VBA based project work, enabling automaticity throughout an excel database
- Planned, prototyped, initiated and managed the migration of specific databases to Manulife's Intranet sites. A prototype recently began migrating to the web by utilizing SQL databases and front end web UI/UX

Quality Assurance Tester

Jan – May 2014

Kobo Inc.

- Worked with the iOS and android application platforms (Xcode and Eclipse) to build, run, debug and test various builds of the Kobo application
- Utilized the AGILE process and arranged bi-weekly retrospective and pre-planning meetings to organize the team for upcoming releases

Junior CAD Drafter/ Technician

Apr – Aug 2013

SK Precision Hydraulics

- Created 2D CAD drawings, assemblies and a BOM for specific parts of injection moulding blocks
- Designed injection moulding parts for Manufacturing and Assembly (DFM and DFA)
- Machined components of fixtures according to CAD drawings for assembly
- Ensured all parts drafted met drafting standards and Geometric Dimensioning and Tolerancing (GD&T)

EDUCATION

Bachelor of Applied Sciences, Honours Systems Design Engineering

Sept 2013 – Current

University of Waterloo Undergraduate – Waterloo, Ontario, Canada

- Expected Graduation: May 2018

INTERESTS

Love fitness, Building and designing anything, Music (Drumming), Archery