Kevin Lavery

(604) 440-4260 kevlavery@gmail.com

PROFESSIONAL PROFILE

- 20 months engineering co-op experience
- Interested in working for a high tech company with opportunities to be involved in both the design and manufacturing aspects of projects
- Designed concept for Arduino controlled espresso machine
- High level of experience with MS Office, AutoCAD, and engineering design softwares

EDUCATION

BEng Mechanical Engineering - Business Minor

August 2013

University of Victoria

SKILLS

Project Management

- Coordinated Innovative Design event for Western Engineering Competition 2013, liaised with competitors and judges, scheduled event, and pre-organized equipment and venue
- Lead team developing a 3-axis CNC milling machine, organized meetings, ensured timelines were met, and communicated with various stakeholders
- Studied process engineering, forecasting and inventory control, quality management and material requirements in a planning and control of production systems course
- Consulted many engineers, technicians, and vendors designing pipeline repair sleeves while working with FortisBC

Engineering Design

- Completed various technical drawings with AutoCAD while working at CFB Esquimalt with The Department of National Defence
- Designed pipeline repair sleeve based on CSA Z662 design standard at FortisBC
- Used Solidworks and NX to model airplane parts in a CAD course, studied the development of interactive 3D computer graphics programs and numerical optimization and its application to parameter design
- Designed pre-build concept for a low cost Arduino controlled espresso machine

Instrumentation

- Designed all aspects of a microcontroller run espresso machine, including accurately and consistently controlling pressure and temperature, use of voltage dividers to approximate sensor outputs as linear and use of Wheatstone bridge to account for fluctuations in ambient temperature
- Interest in learning instrumentation lead to a course about fundamentals of instrumentation which included in-depth learning about 0th, 1st and 2nd order systems, sensors and transducers for common physical measurements, concepts were reinforced through hands-on labs
- Course detailing mechatronic systems and modeling, learned to use spec sheets, I/O lists, microcontroller programming and data acquisition to complete a sorting machine project

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WORK EXPERIENCE	
Children Science Camp Instructor (while fulltime student)	September 2012 – May 2013
Science Venture - <i>Victoria, BC</i>	
Project Management Office Engineering Co-op	January 2011 – August 2011
Fortis BC – Surrey, BC	
Distribution Asset Management Engineering Co-op	June 2010 – September 2010
Terasen Gas – Victoria, BC	
CAD Technician	January 2009 – May 2009
Department of National Defence, Geomatics Office – Victoria, BC	
Civil Engineering Technician - Land Development & Municipal	May 2008 - September 2008
Engineering	
Timberlake-Jones Engineering – <i>Parksville, BC</i>	
VOLUNTEER EXPERIENCE	
VOLUNTEER EXPERIENCE General Volunteer	Summer 2010, 2011 & 2012
	Summer 2010, 2011 & 2012
General Volunteer	Summer 2010, 2011 & 2012 January 2010 – April 2010
General Volunteer Rifflandia Music Festival – <i>Victoria, BC</i>	·
General Volunteer Rifflandia Music Festival – <i>Victoria, BC</i> ESS Director at Large	January 2010 – April 2010
General Volunteer Rifflandia Music Festival – Victoria, BC ESS Director at Large University of Victoria – Victoria, BC WEC 2013 – Innovative Design Coordinator University of Victoria – Victoria, BC	January 2010 – April 2010
General Volunteer Rifflandia Music Festival – <i>Victoria, BC</i> ESS Director at Large University of Victoria – <i>Victoria, BC</i> WEC 2013 – Innovative Design Coordinator	·

PROJECTS

3-Axis CNC Styrofoam Cutter

Summer 2013

- Worked in a team of three to design, build, and test a 3-axis CNC Styrofoam cutting machine
- Designed to customer specifications, weighed multiple potential designs based on criteria, purchased parts, documented, and implemented the final design

Material Sorting System

Spring 2013

- Calibrated sensors on machine that sorted plastic and metal pieces of various colours and materials
- Created and standardized a test procedure for sorting the materials

INTERESTS

- Snowboarding
- Reading
- Brewing

- Cycling
- Travelling
- Camping