

Douglas Chong

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Executive Summary: Versatile, hard worker, capable of learning at a fast pace. Expert in Python, Assembly, Matlab, C, HTML, JavaScript, and Verilog. Prior experience in Ruby, C#, SQL, Java, Visual Basic, R, and C++. Familiar with Simulink, OpenSCAD, PSpice, and Quartus II software. Highly adept in identifying and solving problems. Accepts challenges with good charisma and a positive attitude. Always punctual.

Work Experience: Co-op Asic Verification Engineer May 2014 - May 2015
Infinera Ottawa, ON

- Verified digital circuits using System Verilog and UVM standards
- Maintained Perl code to automatically generate many tedious code segments necessary for proper verification
- Created the entire test environment for an equalizer sub-chip, including an interface to check against a C model, assertion based checking, and automatic functional coverage

Summer Research Student May 2013 - August 2013
University of Toronto Institute for Aerospace Studies Toronto, ON

- Developed a Simulink block set to interface Simulink with 4 custom mechatronics circuit boards controlled by Microchip PICs featuring:
 - Automatic C code generation, compiling, and hex code burning
 - Control drivers for DC motors, IR sensors, ADCs, RS232, I2C, HD44780 LCD, DS1307 real time chip, and other peripherals.
 - Rapid prototyping and real time deployment capabilities
- Created, tested, and debugged example models for each block
- Streamlined the firmware development of PIC16 microcontrollers through updating auxiliary software programs in VB.NET and C#
- Assisted in the web development of pml4all.org, which features the above Simulink block set and auxiliary software programs

Projects:

- Built and programmed the firmware for an autonomous Ping-Pong ball packager using a PIC16F877 microcontroller in assembly
 - Capable of displaying run time on a PC through an RS232 port
 - Featured permanent logs through the use of EEPROM memory
 - Featured a keypad and LCD module to allow the user to select how many boxes to package, and which patterns to package
- Designed multiple games using HTML5 and javascript
 - Featured the usage of the HTML5 canvas element
- Developed a full dog daycare web application using Node.js
 - Capable of users requesting other users to take care of their dogs from specified times, and leaving comments/recommendations
 - Able to login using Facebook for convenience
 - Featured a RESTful API
- Developed a personal website to showcase projects and interests at www.douglaschong.com

Education	Bachelor of Applied Science at the University of Toronto, Toronto, ON (Engineering Science, Electrical and Computer Major)	2016								
Awards:	University of Toronto President's Entrance Scholarship Recipient Queen Elizabeth II Scholarship Recipient Data Management Proficiency Award	2011 2011 2011								
Extra- Curricular Activities:	<p>Computer Science Games Participant March 2013/14</p> <ul style="list-style-type: none"> ➤ Competed in the annual computer science games for two years. ➤ Participated in "Databases" event, which featured creating queries on a provided database using PostgreSQL, as well as theoretical questions ➤ Participated in "Relay Programming" event, which featured a team of 3 programmers creating a Tetris game, code breaking algorithm, and a resource allocator program. Each member worked on each task for one hour, and the only communication between teammates were by comments left behind <p>Toronto District School Board (TDSB) September 2010 - June 2011 SuperCouncil Secretary</p> <ul style="list-style-type: none"> ➤ Organized monthly meetings for student leaders within the TDSB ➤ Took copious notes and created professional minutes to be posted on the TDSB website ➤ Provided student input at executive meetings with TDSB executives 									
Interests:	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Rock Climbing</td> <td style="width: 50%;">Robotics</td> </tr> <tr> <td>Ultimate Frisbee</td> <td>Android Apps</td> </tr> <tr> <td>Soccer</td> <td>Cycling</td> </tr> <tr> <td>Volleyball</td> <td>Hockey</td> </tr> </table>	Rock Climbing	Robotics	Ultimate Frisbee	Android Apps	Soccer	Cycling	Volleyball	Hockey	
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