

🔧 SKILLS

Hardware:

- » **Analog and digital design experience with:**
 - > Microcontrollers and FPGAs
 - > SPI, I²C, USB interfaces
 - > Switching power supplies
- » **Schematic capture, layout, and simulation using:**
 - > Allegro, EAGLE, Multisim, Quartus, SPICE
- » **Board bring-up and prototyping on PCB, Perfboard, Flex**
- » **Hands on lab experience in:**
 - > Soldering surface mount components
 - > Oscilloscopes, Power Analyzers, Waveform Generators, Network Analyzers, Frequency Counters

Software:

- » **Low-Level firmware development in:**
 - > C, VHDL, Assembly - ARMv7 and x64
- » **High-Level application development in:**
 - > C++, C#, JavaScript, Java
- » **Web-application development in:**
 - > jQuery, AngularJS, Backbone.js, Node.js, Google Maps API, HTML5, CSS3
- » **Automation scripting in:**
 - > MATLAB, Ruby, Python, Shell, Batch, SQL

👜 EXPERIENCE

Apple Inc. Jan. - May 2015 Hardware System Integration Engineer

- » Worked in the Apple Watch team, designing failure analysis boards to:
 - > Generate and inject sine waves onto a DC rail for power supply noise rejection testing
 - > Check for dendrite formation and increases in connector contact resistance
- » Developed a hardware validation system with:
 - > Automated power analysis, host interface, and clock stability tests
 - > User Interface for Keysight driver libraries

Genesys Laboratories April - Sept. 2015 Front-End Software Engineer

- » Developed a front-end framework for use in all AngularJS based web applications
 - > Full build process with Grunt, Bower, and Jenkins
 - > Unit testing with Karma and Jasmine
- » Ported applications from Backbone.js to AngularJS

www.RateMySublet.com June 2015 - Now Cofounder and Developer

- » Developing an upcoming web application that lets students review and lease rental homes
 - > Technologies used include: AngularJS, jQuery, Google Maps API, NodeJS, MongoDB, Heroku

FGF Brands Aug. - Dec 2013 .NET SharePoint Developer

🧪 SIDE PROJECTS

USB Oscilloscope

- » Currently developing an oscilloscope with a custom Windows user interface. It incorporates an 8-bit PIC microcontroller for signal sampling and computer interfacing via USB.

LED Music Visualizer

- » Designed and built a circuit to drive an array of LED's to the beat of any music source. Audio frequency sensitivity can be manually tuned based on the genre or quality of the source.

Benchtop Power Supply

- » Created a DC power supply from a spare computer PSU with an output ranging from 2 to 12 Volts and a dedicated digital circuit rail. It displays the voltage using a PIC and a three-digit seven segment display.

🎓 EDUCATION

University of Waterloo 2012 - Present Pursuing B.A.Sc. for Electrical Engineering

- » **Academic Standing:** 79% cumulative average
- » **Relevant Courses:** Electronic Circuits 1 & 2, Digital Circuits and Systems, Linear Circuits, Analog Control Systems, Signals and Systems, Device Physics, Quantum Physics, Digital Computers, Algorithms and Data Structures