

SKILLS

Significant hardware experience on personal projects with:

- Circuit development on PCB, stripboards, and breadboards
- PCB Etching, Surface Mount and Through-Hole Soldering
- Circuit design and analysis using Oscilloscopes, Signal Generators, Meters
- FPGA and Microcontroller Programming
- EAGLE, Multisim, SPICE, Logicator, AutoCAD

Software development experience with:

- Low-Level programming in **C**, **VHDL**, **Assembly** - ARMv7 and x86-64
- High-Level programming in **C++**, **C#**, **JavaScript**, **Java**
- Web development with jQuery, Angular, Backbone, Node, Google Maps
- Scripting with Shell, Python, SQL

EXPERIENCE

Software Developer

April – September 2014

Genesys Laboratories

- Developed an AngularJS based front-end framework for all Genesys web apps
 - Nested tree component with lazy-load and customized searching
 - Customizable single and multi-select dropdowns
- Ported over BackboneJS based applications into the new AngularJS framework
- Currently developing the Genesys communication protocol's log analyzer

Co-Founder and Developer

June 2014 – Present

www.RateMySublet.com

- Web application that lets university students review and select rental homes
- Primarily focused on front-end development with some back-end work
 - Based on AngularJS, Google Maps API, jQuery, NodeJS, MongoDB
- Expected release date is October 2014

.NET and SharePoint Developer

August – December 2013

FGF Brands

- Developed a document management system for vendor and supplier purchases
 - Daily job would check for expired documents, update the websites and database, and send emails accordingly
- Created scripts for cross server document transfers and site creation automation
- Developed a mobile web-app for remote media capture and file uploading

Traffic Systems Technician

January – May 2013

Municipality of York Region

- Programmed traffic signal timers as well as spread spectrum radio transceivers
- Serviced traffic signals for hardware and communicational outages
- Installed and tested backup power to the cellular tower network hubs

VISIT: www.smoubedi.com/#/projects

SIDE PROJECTS

PIC Based USB Oscilloscope

- Currently developing a two-channel oscilloscope for use with a PC
- Incorporates a PIC 18F series microcontroller
- USB port is used to power the circuit and send data to the PC waveform displaying software

Sound-reactive LED Lighting

- Designed and built a circuit to drive LED lights according to an analog audio input
- Incorporates an op-amp amplification stage with a variable band-pass filter, a rectification stage, and a virtual ground circuit
- Etched and soldered a PCB for the final product

DC Variable Power Supply

- Created a DC power supply from a leftover PC ATX Power Supply Unit
- Output ranges from 2.1 Volts to 12 Volts, and has a dedicated Microcontroller powering port
- Displayed the voltage using a PIC and a three-digit seven segment display

EDUCATION

University of Waterloo - *Waterloo, Ontario, Canada*
2B Electrical Engineering

2012 - Present

- Waterloo Euclid Mathematics Competition – Top 25%
- Chem13 Competition – Top Third
- Canadian Graphic Design Competition Scholarship

INTERESTS

Electronics: I love to tinker with electronics, design and build my own circuits on my free time and take apart old electronics just for the kick of it

Music: I am an avid Pianist playing for over 12 years, have learned to play the trumpet and I am currently self-learning the violin

Athletics: As an ex-lifeguard and swim-instructor, I have a deep passion for swimming, and I am also a devoted weight lifter

Graphic Design: Self-taught and practiced for over 4 years, I made a name for myself online and my works can be seen at www.shaheenster.deviantart.com