

Education

University of California, Irvine

Bachelor of Science, Electrical Engineering
With Specialization in Electro-optics & Solid State Devices

March 2014

Experience

Medtronic – Embedded Systems Software Engineer

- Responsible for executing test cases, documenting results and defects
- Performed Black-Box Automated Testing on Continuous Glucose Monitoring Devices
- Contributed to building large Python framework for testing embedded systems

October 2014 – Now

Marvin Test Solutions – Engineering Intern

- Developed software and designed military grade cable to collect key performance requirements for defense bomb rack
- Determined cause of hardware failure and helped implement a fix
- Researched specifications of different components and found best parts for given constraints
- Collected components on Bill of Materials for circuit card assembly

August 2013 – March 2014

Projects

RFID Portable Shopping System

Project in Senior Design, University of California Irvine

Developed a portable RFID reader that scans items with RFID tags, locates ID's in a database and generates a QR code containing receipt data of all items scanned.

February 2014

Programmable-Depth Shift Register

Internal Circuit Design Electronics, University of California

Designed basic logic gates from transistor level in Cadence. Used gates to build multiplexer, address decoders, and D-flip flop. Final design was tapped delay line that was 4 bits wide and 16 words deep.

December 2013

AM Transmission of Audio

Personal Project

Built a transmission system in which a signal from an audio device is modulated, demodulated and then amplified through a speaker.

April 2012

Research

Indirect Recombination

Research under Dr. Chin C. Lee (Ph.D), University of California Irvine

Researched what determines the rate of recombination in semiconductors. Studied about different types of recombination (i.e band-to-band, trap assisted, surface recombination). Analyzed physics of semiconductors at low-level.

November 2012

Skills

Professional: Proficient with electronic lab equipment (i.e oscilloscope, function generator, multi-meter, power supply), PCB layout, BOM creation, RS-485, UART

Software: Familiar with Altium and Cadence (schematic and layout), Mathematica, MatLAB, Octave, Unix/Windows, AutoCAD, firmware, Big Data, Machine Learning, AutoCAD (CADD)

Languages: Python, C/C++, Assembly Language, HTML/CSS

