

Education

University of California, Irvine

March 2014

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

Experience

Marvin Test Solutions — *Engineering Intern*

August 2013 – March 2014

- 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

Irvine Institute of Technology — *Technical Assistant*

August 2013 – March 2014

- Responsible for recording of audio and video for classroom lectures
- Troubleshoot, provided assistance online and customer service
- Assisted professors in managing course material
- Maintained and monitored online database for students

Projects

RFID Portable Shopping System

February 2014

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.

Programmable-Depth Shift Register

December 2013

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.

AM Transmission of Audio

April 2012

Personal Project

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

Research

Indirect Recombination

November 2012

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.

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

