

## 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

