

## Education

### University of California, Irvine (March 2020)

*B.S., Computer Science and Engineering*

GPA: 3.28

### College of the Canyons (June 2016)

*A.S., Mathematics*

Obtained an Associate of Science Degree in Mathematics with honors while concurrently attending high school.

## Professional Experience

### Skyworks Solutions, Inc. (June 2019 - Present)

*Software Engineer Intern (Wafer Foundry Engineering)*

- Developing custom automation solutions to decrease cycle time of tapeout production
- Implemented best practices in the position such as Kanban, Agile epics and stories, and CI/CD to improve code quality and workflow
- Maintaining a full stack web application and RESTful API that utilize ASP.NET Core, MVC, Entity Framework Core, and C#
- Improved design efficiency by 80% by writing a shell script automation

### Axxiom Data, Inc. (May 2017 - September 2017)

*Software Intern*

- Developed new features for Axxiom's content management system using PHP
- Improved product creation speed by 180 times by implementing an automation solution using Python
- Improved development time by introducing Git and leveraging its use

## Projects

### Yelp Clone (2019): [Link](#)

- Designed a full-stack application that replicates Yelp for campgrounds
- Implemented using MongoDB, Express.js, and Node.js
- Features authentication, sessions, flash messages, and other features using various JavaScript packages

### Car to Car Network (2019)

- Creating a Car to Car network proof of concept using Arduinos, Zigbees, and RC cars
- Writing a hardware abstraction layer to the Arduino GPIO in C++ to make it easier to create the network
- Following the IEEE 802.11p standard to synthesize a high quality end product

### Pure Lisp Interpreter (2019)

- Recreated the Pure Lisp interpreter using Pure Lisp (the eval() function)
- Implemented dynamic typing using a global association list

### SystemVerilog RISC-V Processor (2019)

- Designed a 5-stage pipelined processor in SystemVerilog
- Reworked the design code to synthesize a 260 MHz processor
- Utilized Git version control to maintain and compare the pipelined and single-cycle design syntheses

### Python SoundCloud Scraper (2019)

- Created and scheduled a CRON job to run a Python script to scrape the SoundCloud website
- Utilized the Twilio API to send an SMS to myself whenever certain artists' uploaded new music

### EthicsViz (2018): [Link](#)

- Worked with Professor Matthew Bietz at the University of California, Irvine to develop a system to analyze users' online data
- Utilized the JavaScript library D3.js for data-driven documents
- Sponsored by the National Science Foundation to investigate pervasive data ethics

## Other Experience

### SD Hacks 2019 - Spotify Mood Ring: [Link](#)

- Designed a web application using Node.js, Express.js, EJS, and Bootstrap 4
- Application consumes the Spotify API and requests the user's top songs, related artists, and acoustic information for the songs
- Created a display page which plots the user's top songs using Chart.js according to danceability, valence, and popularity

### UCI Blockathon 2018

- Engaged in multiple workshops setting up and using blockchain platforms presented by companies such as nem, Hyperledger, and ConsenSys

### Engineering Conference UCI 2019 - Published Paper: [Link](#)

*Project Manager, Design Lead*

- Led a team in researching and compiling a 41 page research report on the implementation of an automated greenhouse
- Researched and described a convolutional neural network that would increase crop yield every iteration
- Won the conference and had the report published by the University of California, Irvine

### Kappa Sigma Fraternity

*Vice President, Treasurer, Website Designer, Recruitment Chair*

- Organized biannual recruitment for three years
- Managed a \$150,000 yearly budget
- Designed the organization's website using HTML, CSS, and JavaScript

## Technical Skills

**Languages:** JavaScript, Python, Perl, Java, SystemVerilog, Bash, HTML, CSS, C, C++, C#, SQL, L<sup>A</sup>T<sub>E</sub>X

**Tools:** Node.js, Express.js, MongoDB, Unix, Linux, Xilinx, VHDL, MATLAB, Mathematica, ASP.NET