

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 - magna cum laude

GPA: 3.73

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^AT_EX

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