

Brandon Hawi

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(818) 855 - 0542

Education

University of California, Irvine (March 2020)

B.S., Computer Science and Engineering

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 (June - Present)

Software Engineer Intern (Wafer Foundry Engineering)

Working as a software intern at the Wafer Foundry Engineering Group at Skyworks Solutions to automate processes to speed up cycle time of mask production and trend analysis, maintain an internal website created using C# and ASP.NET to run Python scripts that access a MSSQL server, and work with Calibre DRV and other EDA tools to automate other processes using shell scripting in a Unix environment.

Axxiom Data, Inc. (May - September 2017)

Software Intern

Worked directly under the CEO of Axxiom Data to help develop new solutions within Axxiom's content management system, upkeep it's current websites, and prepare the system for future development. Learned about the use of PHP in web application development and the Git VCS.

Invisible Touch Events (January - September 2017)

Light/Audio Technician

Worked as a technician for an event planning company based in the Tustin area and helped research new lighting/audio solutions for events, troubleshoot electrical issues on the fly, and develop connections with clients to maintain future business.

Projects

SystemVerilog RISC-V Processor (2019)

Designed a 5-stage pipelined processor in SystemVerilog utilizing SystemVerilog interfaces and other SystemVerilog programming features. After designing the processor, I reworked parts of the processor to be synthesizable; the synthesis ran at a clock speed of 3.8 ns (260 MHz).

Python SoundCloud Scraper (2019)

Wrote a Python script that scraped SoundCloud's website and checked specific artists' profiles occasionally for new music uploads. I would manually update the list of artists and the script would send me a text using an API called Twilio.

Pure Lisp Interpreter (2019)

Wrote the evaluation function for Pure Lisp using Pure Lisp. This required recursion and the use of a global association list to create the functionality of dynamic typing that is used in Lisp and many scripting languages today.

EthicsViz (2018)

Worked with a researcher on the University of California, Irvine campus to develop a system that analyzed user's online data using platforms such as Google History, Spotify, and Google Maps. The system's goal was to present interesting correlations using users' online "footprint". The system used D3.js, a JavaScript library for data-driven documents.

Discrete Cosine Transform VHDL (2018)

Designed and simulated a Discrete Cosine Transform circuit using VHDL and Xilinx. The chip was designed to be used for video compression.

Other Experience

Engineering Conference UCI

Project Manager, Design Lead

Led a team in researching and compiling a 41 page research report detailing the implementation of an autonomous vertical farm that utilized an evolutionary algorithm and a convolutional neural network to improve biomass yield every iteration. The research report was published by the University of California, Irvine and can be found on their eScholarship website.

Kappa Sigma Fraternity

Treasurer, Website Designer, Recruitment Chair

Organized biannual recruitment for three years, managed a yearly \$150,000 yearly budget, and designed the chapter's website using HTML, CSS, and JavaScript.

Relevant Coursework

- Three courses (one year) of Python coursework
- Three courses (one year) utilizing Unix server scripting
- One course in Databases utilizing SQL
- One semester of Proficiency in Microsoft Programs using VBA

Technical Skills

Languages

C, C++, C#, Java, SQL, HTML, CSS, JavaScript, VBA, Lisp, Prolog, Python, L^AT_EX

Tools

Unix, Linux, Xilinx, VHDL, MATLAB, Mathematica, ASP.NET