Fernando Vazquez

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Objective

I am looking to obtain a challenging engineering position where I can apply my skills and insights to exceed expectations; A place that offers growth as a computer scientist and engineer with a collaborative team setting

Skills

Programming Languages	HTML, CSS/Sass, Javascript, Python, C, C++, Java
Libraries and Frameworks	React, Node.js, Flask, PyTorch, Numpy, Matplotlib
Tools and Platforms	Git, Azure, Docker, Kubernetes, Jenkins, Verilog, Quartus Prime, Firebase, Gradle, Maven

Experience

Software Engineer **September 2021 — Present**

Nisum *Fremont, CA*

- Setup CI/CD pipelines for containerized web applications using Docker, Jenkins, and Azure Kubernetes Cluster
- Write modern and robust code for a diverse array of internal projects using React and Springboot to then deploy these services into a live Microsoft Azure Kubernetes Service cluster
- Took part and completed the Ascend Accelerator program to gain specialized training, mentorship, and preparation for client's digital and eCommerce initiatives

Research Assistant **July 2019 — September 2021**

Scripps Orbit and Permanent Array Center (SOPAC) *La Jolla, CA*

- Used the Python Flask framework to develop and deploy a private web application that facilitates data management and visualization for internal operations
- Wrote Python scripts to collect, filter, and cleanse data from the institution archives to generate logs and provide task automation
- Rewrote, refactored, and documented outdated Perl scripts into modern Python scritps to function in updated RHEL 7 servers

Student Avionics Engineer **October 2018 — June 2019**

Rocket Propulsion Laboratory (RPL) *La Jolla, CA*

- Worked in a team of students to redesign, test, and implement an engine controller unit for a liquid-propellant rocket
- Designed and printed a BJT transistor array PCB to properly toggle relays by footprint searching, making schematics, and routing in Altium designer
- Designed an INA326 instrumentation amplifier array PCB to amplify pressure transducer readings
- Communicate and collaborate with multiple teams of engineers, designers, and producers on a daily basis

Projects

Personal Portfolio Website **January 2022**

- Built a site plan, site diagrams, and wireframes to design my personal portfolio using the progressive enhancement design philosophy
- Technologies used were React, Bootstrap, styled components, and Firebase for deployment

Basic Computer Processing Unit **December 2020**

- Worked with a teammate to construct a basic pipelined CPU using Quartus Prime and Verilog
- Designed an instruction set architecture (ISA) for the CPU to execute some basic arithmetic functions
- Constructed an assembler using Python to convert assembly code to machine code

Flow Tab Manger Chrome Extension **June 2020**

- Worked with a team of developers to create an open-source Chrome extension project to manage browser tabs for productivity purposes
- Technologies used were React, Boostrap, Circle CI, and Webpack

Crimes and Police Dispatch Correlation **March 2020**

- Worked in a team to explore the relationships between the number of crimes, and the police dispatch time in the city of Chicago
- Developed a Jupyter notebook where we cleansed data found from Kaggle using the Pandas dataframe
- Generated a heatmap and line graphs for visualization using Matlpotlib and Numpy libraries to analyze results

Education

University of California, San Diego ***La Jolla, CA***

Bachelor of Science - Computer Engineering *Graduation Date: June 2021*