SANDY SOLAQA

Education

San Diego State University

• Database and WebApp

Bachelor of Science in Computer Engineering, 3.3 GPA

San Diego, California

Graduation: Dec 2023

Relevant Coursework

- Data Structures
- Microprocessors
- Machine Learning
- Embedded Systems
- Computer Networks
- Digital Circuits

Languages

Technical Skills

Languages: Python, C, C++ HTML/CSS, JavaScript, SQL, MATLAB, MIPS Assembly Tools: VS Code, Jupyter Notebooks, Raspberry Pi, FPGA, React, Microsoft Visio

• Windows Programming

Technologies/Frameworks: Git, GitHub, Docker, Jira, Django, Postgres, NodeJS, SQLite

Machine Learning: Supervised Learning, Unsupervised Learning, Deep Learning

• Aramaic Neo Chaldean

• Arabic

Professional Experience

SeaDragon Energy Inc

Full Stack Engineer

Jan 2023 - Dec 2023

- San Diego, California
- Designed and developed an advanced Energy Management System for analyzing diverse use cases, enhancing energy
 efficiency.
- Integrated a simulation tool to model various scenarios under different tariff regimens, supporting data-driven decision-making.
- Implemented a secure authentication system using Django framework, seamlessly connecting to a PostgreSQL database.
- Developed a visualization tool and automated daily reporting of test results to team members using HTML, JavaScript, and CSS.

Dexcom Inc May 2016 – Jul 2017

Medical Device - Operator II

San Diego, California

- Ensured product quality by following precise line clearance procedures to prevent damage to sensors.
- Conducted comprehensive training sessions for new staff members, emphasizing product usage and maintaining high-quality standards.
- Assembled diabetic devices, incorporating slim G7 water-resistant sensors for accurate glucose monitoring.

Projects

Movie Finder | Web Application

- Programmed a web application that leverages a free live API, offering a diverse array of movies tailored to a wide range of tastes and preferences.
- Utilized JSON Web Token (JWT) as a secure means of representing claims between the client (React frontend) and the server (Django backend).
- Created a Docker configuration to seamlessly integrate the frontend, backend, and PostgreSQL database.

Digital Clock Timer | Digital Design and Microprocessor

- Designed a Digital Clock Timer in Verilog, implementing it on an FPGA board. Successfully tested and validated the functionality by displaying the timer output on a Seven Segment display.
- Displayed the timer output on FPGA using switches and buttons, showcasing proficiency of state machine design.

Bookshop Management System | Windows Application

- Designed a comprehensive Bookshop Management System to streamline and enhance the overall efficiency of bookshop operations.
- Developed the system with a responsive design, allowing users to access and manage bookshop operations from various devices, including desktops and tablets.

Volunteer Experience

New Life Church

Jan 2020 - Present

El Cajon, California

- $Multimedia\ Engineer$
 - Implemented a live multimedia system, leveraging a combination of tools to seamlessly record and broadcast programs through live streaming.
 - Applied audio engineering techniques to meticulously manage sound frequencies, utilizing decibel-reading software to maintain optimal levels and prevent ear damage or audio distortion.