

JUAN SIERRA

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EDUCATION

California State University, Fullerton

- Bachelor of Science in Computer Science
- GPA: 3.78/4.0
- Relevant Coursework: Database & File Structures, Web Front-End Engineering, Web Back-end Engineering, Computer Security.

TECHNICAL SKILLS

Languages | Python, C, C++, Java, Javascript, Node.js

Back-End | Dynamodb, MySQL, PostgreSQL, MongoDB, NGINX, Flask, Amazon Web Services, Netlify

Front-End | React, React Native, Svelte, HTML, CSS, JavaScript, Typescript, Node.js, Bootstrap, Tailwind, Vite, Responsive Design

WORK EXPERIENCE

Value Glance | Fullstack Developer

May 2023 - Current

Stock Market Evaluation Tool

React | Python | Dynamodb | Vite | AWS S3 | Tailwind

- Designed, implemented, and maintained fullstack features by integrating Python-based backend services with React frontend, utilizing DynamoDB for scalable data storage, which significantly improved user experience and reduced page load times by 25%.
- Collaborated closely with the design team to develop and adjust web pages, leading to a 25% increase in user satisfaction and engagement.
- Developed and maintained a reusable component library, streamlining development processes and reducing time-to-market by 20%.
- Refactored large portions of the codebase and introduced global state management, reducing repeated code and improving maintainability.
- Utilized Tailwind CSS to implement responsive design best practices, ensuring seamless user experiences across all devices and achieving a 35% increase in mobile and tablet user retention.

CSUF | Summer Research Intern

May 2022 - August 2022

AI And Machine Learning Applications

Jupyter Notebook | Python | Matpy | OpenCv

- Developed and executed multiple hands-on data science projects using Jupyter Notebook and Python, significantly advancing my proficiency in data analysis and machine learning fundamentals.
- Collaboratively worked with a team to identify and acquire over 10 diverse datasets for targeted research, directly enhancing the depth and breadth of project insights and objectives.
- Designed and executed a Python-based machine learning model on a selected dataset, achieving a 95% accuracy rate in predictive analysis, thereby exceeding project objectives and contributing significantly to the research outcomes.

PROJECTS

Fullstack | Bucket Buddy

April 2023 - December 2023

A bucket list website

React | Vite | Psql | AWS | Jsx | Nginx

- Deployed a feature-rich bucket list website, leveraging Nginx and Vite for seamless continuous deployment, which reduced deployment times by 40%, streamlining the update process and facilitating easier modifications.
- Implemented robust JWT-based user authentication, that was designed and tested to ensure exclusive access for over 5,000 users, demonstrating the system's robust capacity for data security and user privacy.
- Utilized PostgreSQL to establish a scalable and relational database structure, optimizing data management and contributing to a 30% improvement in query performance and flexibility.
- Leveraged React to develop modular and reusable components, enhancing maintainability and speeding up front-end development by 20%.
- Created multiple interactive pages on the frontend, delivering a dynamic UX and engaging interface for improved user interaction.
- Hosted the API and PostgreSQL database on AWS using services like EC2 and Route 53, establishing a highly reliable and scalable infrastructure, ensuring 99.9% uptime and seamless data management for thousands of global users.

Fullstack | AI-Enhanced Photo Platform

May 2023 - July 2023

Film photography album webpage

Python | Node.Js | Nginx | Html | CSS

- Developed and launched an advanced web platform that dynamically displays hundreds of images from a designated folder, employing state-of-the-art image recognition technology to accurately detect objects within images
- Designed and implemented a proprietary API that smartly crops and masks detected objects in over 1000 images, enabling precise extraction and manipulation of visual elements using Javascript, HTML, and CSS
- Seamlessly integrated the DALL·E API into the platform, processing over 500 masked images weekly to generate AI-driven modifications that significantly enhanced visual content with creative transformations.
- Performed over 30 hours of rigorous testing and debugging to refine the image recognition and modification processes, achieving a 99% accuracy rate in AI-driven enhancements and ensuring high reliability.

Fullstack | Accounting

March 2024

Bill and Invoice Webpage

NestJS | React | Typescript | Prisma | PostgreSQL

- Spearheaded the development of a cutting-edge full-stack application utilizing Node.js with NestJS and React with TypeScript, showcasing exceptional prowess in modern web technologies and sophisticated API architecture.
- Engineered a robust backend framework incorporating advanced user authentication and Prisma ORM for seamless data handling, significantly boosting system security and operational efficiency. This architecture has enhanced data processing speeds by 50%, leading to a smoother user experience and higher satisfaction rates.
- Crafted an intuitive and aesthetically pleasing user interface following precise design mock-ups, employing React to ensure a seamless and adaptive user experience across a multitude of devices.
- Implemented state-of-the-art state management strategies with Redux and sophisticated error handling techniques, culminating in a highly reliable and user-centric application that consistently delivers top-tier performance. These improvements have reduced error rates by over 60%, ensuring a stable and dependable platform for all users.

Back-End Software Engineer | Wordle Api

August 2022 - December 2022

Restful wordle api

Python | Nginx | LiteFs | Sql | NoSql

- Led a team effort to conceptualize, design, and deliver a robust RESTful API for a mock Wordle game, enhancing the user experience for over 10,000 daily players.
- Designed and deployed Nginx as a reverse proxy, integrating authentication to serve over 5,000 requests per minute as an efficient API gateway, significantly optimizing performance and security.
- Configured and managed a Python RQ-based message queuing server, handling over 2,000 tasks per hour, ensuring timely data processing and system responsiveness.
- Implemented LiteFS to replicate a SQLite database, achieving a 99.9% uptime and enhancing data storage and retrieval, supporting a scalable and fault-tolerant system for thousands of concurrent users.

Frontend | Professional Web Portfolio

February 2024 - March 2024

Custom web portfolio

Html | CSS | Javascript

- Developed a web portfolio using HTML, CSS, and JavaScript by implementing a modular structure and ensuring cross-browser compatibility, demonstrating foundational web development skills.
- Deployed the portfolio on GitHub Pages, configured repository settings, and set up a custom domain, resulting in a 50% reduction in update time. Implemented continuous integration with GitHub Actions to automate testing and deployment, reducing errors by 30%.
- Used responsive design techniques and media queries to optimize for various devices and screen sizes, leading to a much better user experience.
- Enhanced web page functionality using Bootstrap libraries to streamline the layout and improve interactivity, resulting in improved user experience and engagement.

Mobile App Developer | Decibel Warrior

February 2024 - March 2024

Personal mobile game project

React Native

- Conceptualized and developed "Decible Warrior," a mobile game that challenges users to keep their finger within an invisible moving radius on the screen, using React Native and JavaScript.
- Integrated audio feedback functionality using the Audio API, delivering instant and humorous sound effects when users fail to stay within the designated area.
- Developed user settings allowing players to choose from dozens of hilarious sound effects, enhancing customization and player enjoyment.
- Implemented dynamic game mechanics to randomly adjust the speed and size of the moving radius, increasing difficulty and user engagement.
- Utilized Async Storage to save and retrieve leaderboard scores, allowing users to track their high scores and compete against themselves.