

Carson Zuniga

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Skills

Languages: JavaScript, TypeScript, Python, Java, SQL

Technologies: React, Node.js, Express, MongoDB, AWS Lambda, Docker

Education

University of Illinois at Urbana-Champaign – BS in Computer Engineering, GPA 3.78 2023

- Developed a robotics system using rospy and OpenCV to control a robotic arm with a camera for building structures, enabling precise movements and real-time adjustments.
- Built a chess engine in Python that supports move generation, evaluation, and AI opponent capabilities for playing chess against users.
- Engineered a five-stage RISC-V pipelined CPU and created an operating system with features including paging, video memory management, a file system, and multithreading support, showcasing advanced hardware and software integration.

Experience

Full-Stack Engineering Intern, Publicis Sapient – Chicago, IL May 2022 – August 2022

- Developed and launched a dynamic web application using React and AWS Lambda with MongoDB for a major international fast-food client, improving customer engagement by 20%.
- Designed and implemented a loyalty feature using non-fungible tokens (NFTs) on the Ethereum network, enhancing customer retention by providing tradeable rewards.
- Introduced gamification elements and personalized user experiences, contributing to a notable increase in daily active users and customer satisfaction.
- Created over 100 test cases using TypeScript, achieving 80% test coverage and ensuring the reliability of 10+ key features; utilized Docker to maintain consistent environments across development and production.

Front-End Associate, Costco – Chicago, IL August 2023 – Present

- Revamped the front-end of internal tools using React, improving user satisfaction scores by 20%.
- Built an inventory management dashboard with MongoDB and Express that tracks real-time data, cutting manual inventory checks by 40%.
- Created reusable, responsive components with Bootstrap for faster development and a consistent look across all devices.
- Improved backend performance by 25% by optimizing Node.js server code and database queries.

Projects

carsonzuniga.com github.com/CarsonZuniga/Carson_Zuniga_Portfolio

- Developed a personal website to showcase skills, projects, and experience, providing an interactive portfolio for potential employers and collaborators.
- Utilized Vite for fast builds, React for dynamic UIs, React Router DOM for navigation, and Cloudflare Pages for reliable deployment.
- SpotifyToYouTube - Grabs user's playlists using Spotify's Web API, uses the OAuth 2.0 protocol for authentication and authorization into user's Google Account, and searches for songs/creates playlist using Google's YouTube API.