Ruben Cerda

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GitHub: MINTYoo | LinkedIn: Ruben Cerda

EDUCATION

California State University San Marcos — Bachelor of Science in Computer Science

August 2020 - December 2024

Dean's List: Fall 2021, Spring 2024 **GPA**: 3.84

TECHNICAL SKILLS

Languages: JavaScript, Python, C++, Kotlin, Golang, SQL

Frameworks & Libraries: React, React Native, Node.js, Flask, Tkinter, Pandas, Tailwind CSS

Tools & Platforms: Git, Bash, Docker, AWS, Terraform

Concepts: RESTful APIs, Infrastructure as Code, CI/CD, Authentication Systems, Agile Development

PROFESSIONAL EXPERIENCE

ChakraTech | Software Engineer Intern

June 2024 - September 2024

- **Developed** a React Native mobile application that improved staff task efficiency by **25%**, reducing manual processes and increasing workflow visibility.
- Assisted in creating RESTful APIs for backend services and Authored Terraform configurations that automated 100% of AWS resource provisioning.
- Utilized AWS services including Amplify and Cognito for authentication and app deployment.

STEM Success Center, Computer Science Tutor for CSUSM

August 2021- December 2021

- Provided individualized tutoring sessions for students in various computer science concepts, including programming languages, data structures, and algorithms.
- assisted students in debugging code, troubleshooting technical issues, and preparing for exams and assignments.

Project Experience

Live-Chat Ticket System Development

- Implemented a custom RESTful API using the **MERN stack (MongoDB, Express, React, Node.js)** to streamline client query management and drastically reduce response time.
- Spearheaded the development of a dynamic live-chat ticket system, **handling over 50 concurrent users**, improving client communication efficiency and reducing average ticket resolution time by 30%.

Immersive Boid Game Project

- Developed an engaging gameplay experience where players control a sprite that dynamically influences boid behaviors, increasing game difficulty through adaptive density and speed.
- Utilized p5.js for advanced mechanics, applying vector mathematics for movement and collision detection.

Laser Tag System Development (Embedded Systems Project)

- Programmed custom firmware in C/C++ for precise laser detection and responsive scoring, maintaining <10ms latency for real-time accuracy.
- Integrated wireless communication modules enabling **synchronous gameplay for up to 16 players** across a 30-meter range.
- Designed and tested user feedback mechanisms with LEDs, sound signals, and LCD providing immediate feedback and enhancing the user experience.

Accomplishments

Fraud Flow: Hackathon Competition Winning Project-LPL Financial

Built email fraud detection using AWS, Power Automate, GPT-3 to scan emails

January 2024