Jay Buensuceso

jbuens001@gmail.com | US Citizen | Willing to relocate | Eligible for Security Clearance

EDUCATION

University of California, San Diego

San Diego, CA

B.S. Cognitive Science Machine Learning, Minor in Computer Science

Graduated Mar 2024

EXPERIENCE

Qualcomm Institute San Diego, CA

Research & Development Engineer I (Contract)

Apr 2024 - Nov 2024

- Increased Makerspace engagement by 25% by developing a React + Node.js digital signage platform powering daily events and announcements
- Cut backend latency 40% by profiling REST APIs and optimizing PostgreSQL queries, improving responsiveness of the central admin dashboard for the signage system

Qualcomm Institute San Diego, CA

Makerspace Intern

Mar 2023 - Mar 2024

- Reduced 3D printer downtime from 7 days to 48 hours by building a React + Redux dashboard with PrusaLink API, giving staff real-time visibility into print farm issues
- Enabled seamless check-ins for 5,000+ students and supported 8,000+ monthly logins by developing a user management system with integrations to Google Sheets and UCSD APIs

Climbr - AI Climbing and Workout Tracker

San Diego, CA

Full Stack Developer

2024 - Present

- Designed and launched a SaaS-style fitness tracking platform (Next.js + TensorFlow.js MoveNet) delivering real-time climbing feedback, tested by 100 beta users
- Optimized data retrieval with TanStack Query caching, boosting application responsiveness by 80% and enabling smoother workout tracking and analytics

FIRST Tech Challenge League Selection

San Diego, CA

Full Stack Developer (Contract)

2021 - Present

- Streamlined league selection logistics for an 80-team robotics region by developing a real-time scheduling application (React + MongoDB, later migrated to Convex), adopted across 4 competition seasons
- Improved data entry accuracy and reduced planning overhead for tournament organizers by replacing manual spreadsheets with a centralized, automated system

Cultural Heritage Engineering Initiative

San Diego, CA

Research Assistant

2021 - 2022

- Delivered a React + Three.js visualization tool enabling remote inspection of 1M+ point cloud datasets, reducing on-site analysis time for UCSD research teams by 70%
- Deployed the application to AWS with CI/CD pipelines (GitHub Actions), ensuring reliable updates, scalable performance, and continuous availability for lab researchers

SKILLS

- Languages: TypeScript, JavaScript, Python, SQL
- Frontend: React, Next.js, Svelte, Tailwind, TanStack Query, Redux, JWT, Zod
- Backend: Node.js, Express, PostgreSQL, Convex, Supabase, Firebase, MongoDB, REST APIs
- **DevOps:** Docker, Kubernetes, AWS, CI/CD (GitHub Actions, GitLab)
- AI/ML: TensorFlow.js, LLM prototyping
- Tools: Playwright, Figma, Framer, Git