HUNTER NGUYEN

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EDUCATION

San Jose State University

Bachelor of Science in Computer Science | GPA: 3.8

San Jose, CA

- Organizations: Software Engineering Society (Development Officer), Mozilla Responsible Computing Ambassador
- Coursework: Data Structures and Algorithms, Object-Oriented Design, Intro to Computer Systems, Discrete Math

EXPERIENCE

San Jose State University

Sept. 2024 - Present

Expected Graduation: May 2026

Undergraduate Researcher

San Jose, CA

- Created a structured extraction pipeline for 3D designs (.f3d, .step, .iges) with Fusion 360 API for AI validation.
- Built PyTorch model to adapt to extracted design features, refining constraints via design's timeline step analysis.
- Author publication with Prof. Yunjian Qiu (Mech. Eng.) to be presented at 2025 IMECE Conference (CAD Track).

SJSU College of Engineering

Sept. 2024 – Jan. 2025

Software Engineer

San Jose, CA

- Created school Discord bot with LangChain tool calling on educational services through natural language.
- Streamlined retrieval of educational service endpoints using Groq's LPU-based AI inference, boosting efficiency.
- Optimized API performance by implementing asynchronous processing, reducing response times by 20%.

NASA L'SPACE Mission Concept Academy

Sept. 2024 - Dec. 2024

Command & Data Handling Engineer

Remote

- Designed CDH subsystem for a \$450MM lunar rover, incorporating NASA's cFS for fault-tolerant operations.
- Utilized SpaceWire for high-speed data transfer, interfacing with the BAE RAD750 and S-band telemetry.
- Collaborated with a cross-functional team to ensure compliance with CCSDS and improve overall system reliability.

SJSU Software and Computer Engineering Society

Jun. 2024 - Aug. 2024

Software Engineer Intern

San Jose, CA

- Created REST APIs in Node.js to perform CRUD operations on data stored in MongoDB with Express.js for club site.
- Restricted user actions in admin dashboard in Express.js, preventing 50+ officers from modifying higher-role users.
- Designed comprehensive unit tests using Mocha/Chai in Node.js to enhance code reliability and deployment cycles.

PROJECTS

AVA (Accessible Voice Assistant) | Python, FastAPI, Groq, Perplexity, LangChain, ElevenLabs

- Built a voice-controlled browser navigation tool with Browser Use multi-stage AI agents to promote browsing use.
- Optimized AI workflows by integrating Groq for transcription and Perplexity Sonar for structured task reasoning.
- Developed custom AI tooling with LangChain, adding agentic workflows for sending emails and booking flights.
- Won Best Use of Groq, placing 1st out of 37 teams at Cal State East Bay's 2025 HackHayward hackathon.

shring.link | Next.js, TypeScript, SQLite (libSQL), JWT, Redis, Drizzle ORM, Vercel, Tailwind CSS

- Designed a URL shortener with Next.js and SQLite supporting custom aliases, click analytics, and JWT user auth.
- Integrated JWT-based authentication using jose with middleware to secure routes and verify user sessions.
- Wrote REST API routes for URL/user management in Next.js, using Drizzle ORM for efficient database interactions.
- Implemented caching with Redis to store accessed URLs, cutting database query response times by 60%.

lmk (let me know) | Next.js, TypeScript, Supabase (PostgreSQL), OpenAI, Mapbox, Tailwind CSS

- Engineered real-time hazard reporting system, aggregating context through agentic workflow using OpenAI API.
- Incorporated multi-modal processing to enhance the platform's ability to analyze and prioritize reports on urgency.
- Used Mapbox integration to visualize hazard zones using GeoJSON, reducing rendering time from 2s to 400ms.

TECHNICAL SKILLS

Languages: JavaScript, TypeScript, Python, Java, HTML/CSS

Frameworks: React, Node.js, Express.js, Next.js, FastAPI, PyTorch, LangChain, Tailwind CSS **Developer Tools**: Git, GitHub, Docker, MongoDB, Postgres, Supabase, SQLite, Drizzle, Prisma

Certifications: Machine Learning Specialization, Artificial Intelligence