Nathan Tran

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EDUCATION

San Jose State University   San Jose, CA
Bachelor of Science in Computer Science   *Expected Graduation: May 2028*
> **Organizations**: Software and Computer Engineering Society, Mozilla Responsible Computing Club
> **Relevant Coursework**: Data Structures and Algorithms, Object Oriented Design, Computer Architecture

EXPERIENCE

Ego (YC W24)   Nov. 2024 – Present
Software Engineering Intern   *San Francisco, CA*
- Enhanced Roblox game by implementing LLMs, improving conversation coherence and engagement by 20%
- Developed Discord mini-game with Claude API integration, reaching 1.5K active users within first month of launch
- Engineered automated QA testing framework using LLM agents for efficient bug detection and gameplay testing
- Optimized FastAPI backend through caching and query handling, reducing average response times by 15%

Uber   Nov. 2024 – Present
Software Engineering Fellow   *Remote*
- Selected for elite fellowship program (2.9% acceptance rate) focused on engineering principles and system design
- Mastering data structures and algorithms through weekly technical challenges and mock interview sessions
- Collaborating with Uber engineers in bi-weekly mentorship sessions for code reviews and technical guidance
- Building full-stack projects while learning industry best practices through structured GitHub feedback

SJSU Software & Computer Engineering Society   Sept. 2024 – Present
Artificial Intelligence & Machine Learning Team Lead   *San Jose, CA*
- Engineered reinforcement learning model that outperformed human benchmarks in autonomous racing simulation
- Implemented deep neural networks using PyTorch to optimize racing trajectories and vehicle control systems
- Developed custom training environment and reward functions, achieving 30% faster lap times than other students
- Built interactive ML demos in Jupyter Notebooks to showcase AI agent performance to 20+ students

PROJECTS

CanvAI | *Next.js, Typescript, Python, Supabase, FastAPI*   January 2025 – Present
- Developed a Chrome extension that helps students manage Canvas assignments and deadlines with AI assistance
- Built user authentication system with Google OAuth and secure Canvas token storage via Supabase
- Integrated Canvas API to search files, submit assignments, and sync deadlines with Notion/Google Calendar.
- Streamlined student workflows by unifying secure auth, AI insights, and robust API integrations.

DreamScapes | *Meta Quest 3, Unity, C#, Python, PyTorch, FastAPI*   November 2024
- A real-time VR application that uses voice descriptions to render an immersive 3d environment
- Architected FastAPI backend reducing voice-to-3D scene generation time from 2 minutes to 30 seconds
- Built dynamic VR asset loading system supporting real-time scene updates for seamless user experience
- Won **Best Use of AI in XR** and **Best Use of AWS** prizes out of 60 teams at Stanford XR hackathon

SJSU Parking Predictor | *Python, FastAPI, NumPy, Pandas, MatPlotLib*   September 2024 - January 2025
- Developed a ML model, achieving 94% accuracy in predicting parking availablility across 10,000+ daily events.
- Built automated data pipeline processing real-time updates from 5 campus parking structures.
- Scaled Discord bot + Website to 2k+ users with 99% uptime for instant parking notifications.
- Reduced prediction error by 15% using LSTM models and historical parking patterns analysis.

TECHNICAL SKILLS

Languages: Python, Java, C#, Javascript, Typescript, HTML/CSS
Frameworks: OpenAI API, MongoDB, Flask, Pandas, MatPlotLib, Scikit-Learn, PyTorch, Selenium, React, Next.js
Developer Tools: Git, Docker, VS Code, Visual Studio, Unity
Libraries: NumPy, Scikit-Learn, BeautifulSoup4, FastAPI, LangChain, Groq