HUNTER NGUYEN

(669) 261-3077 | hunter.nguyen@sjsu.edu | linkedin/hunterhnguyen | github/hunter-nguyen

EDUCATION

San Jose State University   **Expected Graduation: May 2026**
Bachelor of Science in Computer Science | GPA: 3.8   *San Jose, CA*
- **Coursework**: Data Structures/Algorithms, Object-Oriented Design, Intro to Computer Systems, Discrete Math
- **Organizations**: Software and Computer Engineering Society (Officer), Mozilla Student Ambassador

EXPERIENCE

San Jose State University   Sept. 2024 – Present
Undergraduate Researcher   *San Jose, CA*
- Created architecture for constraint-aware generative design, enabling verification of design constraints.
- Developed custom constraint-embedding layer to validate constraints within engineering designs using PyTorch.
- Drafting paper with Dr. Yunjian Qiu to be presented at **ASME IDETC 2025** Conference.

SJSU College of Engineering   Sept. 2024 – Present
Software Engineer   *San Jose, CA*
- Developed Discord bot with LLM integration utilizing FastAPI and Groq's API for advanced NLP capabilities.
- Implemented tool calling using LangChain framework for external API interactions and complex task execution.
- Integrated security evaluator, rate limiting, parameter validation, and authorization checks for API stability.

theCoderSchool   Jun. 2024 – Present
Coding Instructor   *Los Gatos, CA*
- Mentored **10+** students in Scratch, Python, and Java, going through project-based and personalized instruction.
- Facilitated code camps with **5** other peers in various technologies and applications.

Software and Computer Engineering Society   Jun. 2024 – Aug. 2024
Software Engineer Intern   *San Jose, CA*
- Spearheaded design of system monitoring app with Prometheus and Grafana, providing real-time monitoring.
- Designed scripts to draw data from user's computer in real-time with C using various libraries from different OS.
- Created RESTful APIs in Node.js to perform CRUD operations on data stored in MongoDB with Express.js.

PROJECTS

Secure Send | *TypeScript, Next.js, Supabase, PostgreSQL, Web Crypto API, AES-GCM Encryption*   Jan. 2025
- Developed a secure file-sharing application with client-side encryption, ensuring data remains encrypted.
- Used Supabase's PostgreSQL database to store files securely through custom AES-GCM hashing algorithm.
- Integrated modular TypeScript utilities for file encryption, validation, and handling to increase reusability.

Cat and Dog Image Classification | *Python, PyTorch, NumPy*   Oct. 2024
- Built a convolutional neural network (CNN) to classify 100+ images of dogs and cats with **90%** confidence.
- Used PyTorch to train model with the CIFAR-10 dataset, implementing forward propagation on neural network.

SCE-Advisor | *C, Prometheus, Grafana, Docker, Git*   Jun. 2024 - Aug. 2024
- Implemented WebSockets to draw **8** different hardware processes including CPU and RAM usage for a club app.
- Connected Prometheus and Grafana to the Dockerized server to see Prometheus-parsed data in Grafana dashboard
- Built an HTTP web server with C using socket programming, reducing system monitoring latency by **25%**.

TECHNICAL SKILLS

Languages: TypeScript, Python, Java, HTML/CSS
Frameworks: React, Node.js, Next.js, Express.js, FastAPI, Tailwind CSS, Tensorflow (Keras)
Developer Tools: Git, GitHub, LangChain, Docker, MongoDB, Supabase
Additional Certifications: Machine Learning Specialization, Python, AI