

Tinh-Phong Nguyen

(510) 988-1142 | tinhphong04@gmail.com | linkedin.com/in/tinh-phong-nguyen | github.com/nguytinh

SKILLS

Languages: JavaScript, TypeScript, Java, Python, C, SQL, HTML/CSS, RISC-V Assembly, Racket, Golang

Libraries/Frameworks: React, Node.js, Electron.js, Express.js, Next.js, Angular, Spring, Unislosh, Tensorflow

Databases: MySQL, PostgreSQL, MongoDB, Prisma

DevOps: Docker, AWS, Nginx, Web Sockets

Tools & Others: Git, Postman, SPHERE Research Infrastructure, REST API

EXPERIENCE

SPHERE Software Engineering Intern

June. 2025 – Present

Marina Del Ray, CA

USC ISI SPHERE

- Developed a full-stack calendar and heatmap system with React, PatternFly, and TypeScript, saving teams 10+ hours of manual scheduling per week and supporting 200+ monthly reservations
- Modernized the Distributed Experiments Workflow (DEW) portal by migrating authentication to SPHERE's internal account system, refactoring the Angular + TypeScript frontend, and containerizing the Flask backend with Docker to ensure stable API operations and full-stack reliability
- Integrated the DEW portal with the SPHERE Research Infrastructure, centralizing experiment creation, reservations, and XDC management into a unified platform to improve research data traceability for researchers

Full-stack Software Engineering Intern

June 2024 – May. 2025

4yourbusiness INC.

Pleasanton, CA

- Deployed a scalable inventory management platform with React, Electron, and MySQL that automated product data updates, eliminating manual processes and saving staff 2+ hours per day
- Updated inventory infrastructure by transferring 1,000+ product records from Microsoft Access to MySQL, employing validation and de-duplication strategies to strengthen data accuracy and long-term scalability
- Engineered the company's primary marketing website using Next.js, React, TypeScript, and Tailwind CSS, implementing responsive UI design and integrated email workflows to improve customer engagement

Software Developer

Dec 2024 – May. 2025

Cal Poly — AI For Search & Rescue

San Luis Obispo, CA

- Collaborated with a team to design and develop a web application using React, Node.js, and Firebase, digitalizing search and rescue operations and leveraging AI models to improve search accuracy and efficiency
- Adapted a React-based dashboard to visualize AI-predicted clue locations, enabling search and rescue teams to analyze incident data efficiently in the command post

PROJECTS

HorseGPT

Feb. 2025 – June 2025

AI Horse Race Predictor

San Luis Obispo, CA

- Trained a Gemma 3 model with LoRA fine-tuning on 200,000+ horse races (1990–2020) using Torch, Unislosh, and Pandas, reaching 60% prediction accuracy which outperforms baseline guessing rates
- Leveraged Cal Poly's Unix server GPUs to train and run our LLMs in GGUF format, cutting training time by 40% and reducing inference latency to sub-second prompt responses

Aery

Sep. 2024 - Dec. 2024

Collaborative Motivation Streaks App

San Luis Obispo, CA

- Built a full-stack social media app (TypeScript, React, Next.js, Docker, PostgreSQL), enabling students to track and share daily streaks and habits within friend groups
- Integrated a secure authentication system using Zod for input validation, NextAuth.js for session management, and custom middleware to enhance security

EDUCATION

California Polytechnic State University

San Luis Obispo, CA

Bachelor of Science in Computer Science — GPA: 3.81

June 2026

- Relevant Coursework: Operating Systems; Artificial Intelligence; Theory of Computation; Distributed Systems, Networks and Parallel Computing; Computer Security; Databases; Programming Languages; Software Engineering; Algorithms; Data Structures; Computer Organizations; Object-Oriented Programming