

James Liu

626-692-1110 | liujameszhi@gmail.com | linkedin.com/in/jameszhiliu | github.com/jjamesliu

EDUCATION

University of California Los Angeles

B.S. in Math and Computer Science

Los Angeles, CA

Exp. Graduation June 2027

Relevant Coursework: Software Development, Object Oriented Programming, Data Structures, Algorithms, Computer Systems, Assembly Language, Linear Algebra, Discrete Math, Probability and Statistics.

EXPERIENCE

DevOps Engineer Intern

October 2025 – Present

UCLA Student Media

Los Angeles, CA

- Developing and maintaining scalable **Flask** and **Node.js** web services powering UCLA's **bruinlife.com** and internal platforms accessed by **5K+** students.
- Containerized legacy BruinLife systems with **Docker** and **Docker Compose**, creating reproducible dev/test environments that cut onboarding time and improved deployment consistency.
- Contributed to **CI/CD pipelines** using **GitHub Actions** and Docker, automating build/test/deploy stages and reducing release errors by **20%**.

Software Engineer

October 2025 – Present

UCLA Supermileage Vehicle Team

Los Angeles, CA

- Engineered and containerized the team's **Django backend** with **Docker** and **PostgreSQL**, designing data models and APIs to handle real-time telemetry and sensor metrics.
- Developed a **Next.js + Recharts** dashboard visualizing real-time telemetry from Django APIs, enabling cross-team data access that accelerated testing diagnostics and improved vehicle efficiency.

Software Engineer

July 2025 – Nov 2025

SwiftlyMail

Los Angeles, CA

- Built (**swiftpremium.com**) a SaaS platform (**Next.js + TypeScript**) for AI-driven email automation, serving **50 users** and powering over **100 campaigns**.
- Implemented modular **React components** with **ShadCN** and **TailwindCSS**, improving page performance and reducing render time by **30%**.
- Designed and optimized **PostgreSQL/Supabase** schemas and queries to handle user authentication (Google OAuth) and campaign analytics with efficient indexing.
- Developed and integrated **serverless APIs** in **Node.js/Next.js API routes** leveraging **OpenAI** for content generation, with **batch dispatch + retry logic** ensuring 99% delivery reliability.

Data Analyst Intern

July 2023 – Dec 2023

Lasik Eye Center

Buena Park, CA

- Built a **Python-based ETL pipeline** (**Pandas, pdfplumber, gspread**) to process **100+ PDF files weekly**, automating data extraction and reducing manual entry errors.
- Digitized and centralized **5,000+ patient medical records**, cutting file retrieval time to **less than 30 seconds** for seamless database queries for operational use.

PROJECTS

E-Commerce Dashboard | Python, TypeScript, Next.js, MongoDB, AWS S3, FastAPI

Dec 2024 – Sept 2025

- Built a **FastAPI + MongoDB backend** with **AWS S3** for image/file storage, powering a product analytics dashboard with CRUD APIs that improved sourcing efficiency and drove **\$100K revenue** across Amazon stores.
- Deployed dynamic Video Sales Letter pages for Amazon store owners using **Next.js** and **Vercel**, integrating **email marketing automation with Zapier** that captured user input and delivered personalized assets automatically.

TECHNICAL SKILLS

Languages: Python (NumPy and Pandas), TypeScript, JavaScript, HTML/CSS, Java, C

Web Dev: React, Next.js, Node.js, PostgreSQL, SQL, Supabase, MongoDB

Developer Tools: Git, GitHub, Docker, AWS, MongoDB, Supabase, Netlify, Vercel

AI/ML: HuggingFace, PyTorch