EDUCATION

949-880-4327 | bianlee2004@gmail.com | bianlee.me | linkedin.com/in/bianlee | github.com/bianlee

University of California, Davis

Davis, CA

B.S. Computer Science, Minor in Economics

Jun 2025

• Object-Oriented Programming in C++, Programming & Problem Solving, Data Structures & Algorithms, Computer Architecture, Machine-Dependent Programming in x86 Assembly, Discrete Mathematics, Human-Computer Interaction, Computer Network Fundamentals, System Administration/Linux, Databases, Probability Theory, Linear Algebra

Experience

California Air Resources Board

Jun 2023 - Present

Data Analyst Intern

Sacramento, CA

- Thoroughly performed QA/QC procedures on 6 datasets (10K+ records) and compiled reports on aggregate air pollution emissions during the annual CAP reporting cycle, under Carl Moyer Memorial Air Quality Standards Attainment program
- Reduced manual data entry by ~80% by streamlining an automated importing system from database to front-end interface
- Queried/parsed CSV data from backend using **SQL** and wrote **Python** scripts to develop data pipelines
- Conducted software testing on 10+ features of CARL database management system and communicated critical findings
- Completed cost-effectiveness analysis on Excel to calculate emissions and grants values for State-funded projects

Optimizing.com

Nov 2023 – Feb 2024

Software Engineer Intern

Austin, TX

- Led backend development of CRM dashboard for 10+ SMB business clients with Stripe integrations for financing payments
- Reduced code redundancy by $\sim 20\%$ through refactoring reusable components and employing nested routes in **Remix**
- Designed 6 relational (one-to-many) schemas in **Prisma** for customers/checkouts and implemented API endpoints with Action/LoaderFunctions to listen to HTTP requests and allow CRUD operations

Vestr

Nov 2022 – Jun 2023

Analyst Intern Clemson, SC

- Conducted sell-side stock equity research through Discounted Cash Flow model and market sentiment/industry analysis
- Edited and published weekly company newsletter and delivered +73% subscriber count growth

Projects

ClubHire (clubhire.us) | Next.js, Supabase

Feb 2024

• Currently developing a SaaS platform that allows companies to outsource work to college clubs and manage contracts

DSM-5 Diagnostic Chatbot with Semantic Search | GPT-3.5 Turbo, Pinecone, Langchain, MongoDB

- Used LLM to process DSM-5 document and store vector embeddings to allow for semantic search of psychiatric conditions
- Fine-tuned OpenAI's GPT-3.5 turbo model and built a conversational diagnostic chatbot with Next.js
- Executed Python scripts in Beautiful Soup to scrape web data of nearby physicians & clinics, storing them as key-value documents in MongoDB. Built and served NodeJS API and used Axios library to fetch & render data on screen

Decentralized Exchange & ERC-20 Token | Solidity, Web3.js, React, Truffle Suite

- Wrote Ethereum smart contracts in Solidity to create a custom ERC-20 token & tokenomics and a decentralized exchange • Implemented Constant Product Market formula used in Automated Market Making (AMM) systems, and deployed on
- Ethereum blockchain (mainnet) to allow users to trade custom token for ETH using Metamask wallet

EdTech Web App | MongoDB, Express.js, React.js, Node.js (MERN), Firebase

Jan 2022

- Independently built a full-stack EdTech app that allows browsing & sharing extracurricular/volunteer opportunities
- Onboarded 18 non-profits and received 22k+ total visitors on the platform, after launching on Product Hunt
- Received monetary prize & mentorship from business consultant, Silicon Valley SVSCORE (Mentor: Chuck Scifers)

TECHNICAL SKILLS

Languages: Python, Java, Kotlin, C, C++, JavaScript, TypeScript, Golang, Solidity, SQL, HTML, CSS

Frameworks/Tools: React.js, Next.js, Remix, Node.js, Express.js, Web3.js, D3.js, Git, GitHub, MongoDB, Tailwind, Drupal, Jupyter Notebook, PostgreSQL, Svelte, BeautifulSoup, Postman, Clerk, Supabase, Docker, Zustand, Linux, Excel

Certifications: CompTIA IT Fundamentals+, Jira Software Fundamentals

AWARDS, HONORS & MISC.

UC Davis Dean's Honors List (College of Engineering)

UC Davis Little Bang! Pitch + Poster Competition Winner @ Graduate School of Management (Awarded \$1k) Cyber Skyline Socal Cyber Cup 3rd Place (Awarded \$2.5K)

CyberPatriot National Semifinalist

Independent Composer/Producer (30k+ streams, 12k+ listeners across 40+ tracks on Spotify)