

Tiger Shi

626-525-9256 | tigershi@berkeley.edu | [Website](#) | [LinkedIn](#) | [Github](#)

EDUCATION

University of California, Berkeley

BS in Electrical Engineering and Computer Science

Relevant Coursework: Data Structures, Machine Structures, Efficient Algorithms, Database Systems

Berkeley, CA

December 2026

EXPERIENCE

State Farm

May 2024 - August 2024

Software Engineer Intern

Dallas, TX

- Enhanced an AWS-based vehicle trip data pipeline by automating daily summaries in Python **boto3**, integrating **AWS Lambda** functions with **Amazon SNS** for asynchronous processing of TBs of data in various data stores daily.
- Implemented robust Pytest unit testing, increasing test coverage from 65% to 95% and reducing production defects by 30%.
- Authored comprehensive Mac command-line setup documentation (covering Homebrew, JFrog authentication, and proxy settings), reducing onboarding time for new developers by 40%.

Yieldforge

Jan 2024 - April 2024

Software Engineer Intern

Berkeley, CA

- Designed a streamlined real-time statistics dashboard for liquidity pool metrics using **React** and **TypeScript** delivering up-to-date insights.
- Implemented **Apollo GraphQL** queries to monitor live liquidity data on the Arbitrum Mainnet, cutting data loading times by 25% and ensuring instant access to critical market information.
- Introduced client-side caching, lowering API load by 30% and improving application responsiveness.

Cryptoswap

April 2022 - June 2022

Frontend Developer

Los Angeles, CA

- Created and standardized UI layouts with **React**, **TypeScript**, **Tailwind CSS**, and **Figma** to improve the user experience.

Code Ninjas

Jan 2022 - May 2023

Code Teacher

Fullerton, CA

- Guided students in building JavaScript-based web games, Lua-powered Roblox games, and Unity C# projects, cultivating robust programming skills through hands-on instruction.
- Implemented project-based learning methods, increasing student participation and deepening understanding of coding concepts.
- Mentored an average of 20 students per session, adapting teaching styles to various learning paces and backgrounds.

PROJECTS

Project Store - Full Stack | <https://github.com/tigershii/projectstore>

January 2025 - March 2025

- Built a modern, responsive interface with **Next.js**, **TypeScript**, **TailwindCSS**, integrating **Redux Toolkit** for state management, real-time authentication flow, and shopping cart synchronization.
- Designed and developed RESTful API architecture with **Express.js**, providing endpoints for authentication, user, and item CRUD operations.
- Developed secure authentication system with **JWT tokens**, **HTTP-only cookies**, and bcrypt password hashing, implementing custom middleware for token verification and session management.
- Architected a scalable data model with **PostgreSQL** for persistent storage and **Redis** for caching frequently accessed data, optimizing performance for popular items and user cart interactions.
- Implemented cloud-based image storage using **AWS S3**, enabling efficient management of product images.
- Utilized **Docker** for containerization and **Kubernetes** for orchestration, ensuring scalable and reliable deployments.

CryptoData - Machine Learning

July 2024 - September 2024

- Implemented a CNN model in **PyTorch** using OHLCV and other signals to predict both the direction and magnitude of upcoming candlesticks, achieving 60%+ accuracy
- Transformed raw BTC/USD time-series data into candlestick chart images using NumPy and PyTorch for visual pattern analysis.

TECHNICAL SKILLS

Languages: Java, Python, C, C++, JavaScript, Typescript, HTML/CSS, SQL, Solidity

Frameworks: Next.js, Node.js, Express.js, PyTorch, React, Redux, TailwindCSS, Sequelize, Apollo GraphQL

Databases: MongoDB, Redis, PostgreSQL, MySQL, Firebase Realtime

Tools/Platforms: Git, Bash, AWS, Docker, Kubernetes