# STEPHANY HO

SOFTWARE ENGINEER | Sacramento, CA | 279-759-3060

Nov 2024 – Present

# EXPERIENCE

#### Software Engineer | Alki

- Developed an adaptive SM2 spaced repetition system that analyzes user recall performance to automatically optimize study intervals, improving knowledge retention while reducing necessary review time for learners.
- Integrated pagination for problem sets on the frontend, reducing initial load time by 35% and improving user experience by allowing seamless navigation through large datasets.
- Refactored UI components to a compound component architecture with TypeScript and Tailwind CSS, improving reusability, responsiveness, and accessibility, reducing feature development time by 25%.
- Engineered and automated an end-to-end testing suite using Cypress and GitHub Actions, created custom commands to enhance test reusability, improving software reliability and reducing manual testing efforts.
- Configured MongoDB with Spring Data for scalable storage and retrieval of user data, developed secure RESTful APIs in Spring Boot with robust request handling and data validation to support future growth.

### Software Engineer | MLflow.js

#### Mar 2024 – Dec 2024

- Architected the client library with OOP principles and design patterns, constructed modular TypeScript components
  with intuitive APIs to enhance code maintainability and scalability.
- Spearheaded Jest test infrastructure setup and crafted comprehensive test suites for RunClient and RunManager modules, achieving test coverage up to 97%, establishing robust release processes for a reliable npm package.
- Automated integration testing by employing Docker for standardized build environments and orchestrating GitHub Actions CI pipelines, reducing post-merge issues by 80% and accelerating the development cycle.
- Leveraged Node.js to create the ML integration platform with a highly performant REST API for model connectivity, enabling low latency responses and seamless integration with the npm ecosystem.
- Built a user-friendly Next.js documentation site with detailed API references and video walkthroughs, resulting in a 40% decrease in support tickets and improved developer onboarding.

### PROJECTS

Fiscal Focus | JavaScript, React, Material UI, D3.js, Node.js, Express.js, GraphQL, PostgreSQL

- Implemented interactive D3 charts with GraphQL powered custom filtering, enabling users to visualize spending patterns while minimizing over-fetching, resulting in streamlined data retrieval and elevated user engagement.
- Integrated a hybrid REST/GraphQL architecture using Apollo Server/Client and Express, cutting API calls by 30% and
  accelerating page load times by 25% while reinforcing error handling and cross-component data synchronization.

### BIG O INVASION | TypeScript, React, Redux, Node.js, Express.js, PostgreSQL, bcrypt, JWT

- Employed Redux for centralized state management across all game modules, optimizing data flow and trimming rendering cycles by 15%, resulting in smoother, more responsive gameplay.
- Designed a robust PostgreSQL database that amplified user experience by enabling seamless game continuity and powering features like leaderboards, boosting player engagement.

### RAG Chatbot | LangChain.js, PostgreSQL, OPENAI API

• Devised a RAG chatbot using LangChain.js and Supabase vector database, leveraging prompt engineering techniques that improved response accuracy by 35% and reduced hallucinations in information retrieval.

# TECHNICAL SKILLS

### Languages: TypeScript, JavaScript, Java, SQL

**Frameworks/Concepts**: React, Redux, Node.js, Express.js, Next.js, Spring Boot, HTML/CSS, Tailwind CSS, Material UI, D3.js, PostgreSQL, NoSQL (MongoDB), REST API, GraphQL, Jest, Cypress, OAuth 2.0, Docker, CI/CD, GitHub Actions, Accessibility, RAG, Webpack, Git, Agile/Scrum

### EDUCATION