

# Hayden Thai

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## EDUCATION

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### San Diego State University

*Bachelor of Science in Computer Engineering*

San Diego, CA

Aug. 2019 – May 2024

## EXPERIENCE

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### Software Development Engineer Intern

May 2023 – Aug 2023

*Amazon*

*Seattle, WA*

- Led the development of the draft automation, resulting in a 90% reduction in user interactions, saving tens of thousands of clicks annually and enabling users to focus on high-judgment decisions.
- Designed and implemented two tables in the **Cloudscape React** library to streamline Amazon Fresh store operations.
- Developed and tested 8 **GraphQL** CRUD APIs which interfaced a **Springboot API** running in a **Docker** container that connects to a **DynamoDB** table, improving data access and manipulation capabilities.
- Collaborated closely with cross-functional team members, enhancing version control proficiency and **Git** expertise.
- Demonstrated expertise in **TypeScript**, leading the initiative to transition a 100% **JavaScript** codebase to **TypeScript**, ensuring safer code, fewer runtime errors, and better maintainability.
- Participated in org-wide **Large Language Model** hackathon, where my team built a web app on top of internal Amazon models to allow Amazonian's to paste internal documents/code to get ChatGPT-like responses to enhance productivity.

### Software Development Engineer Intern

May 2022 – Aug 2022

*Amazon*

*Seattle, WA*

- Led development to rewrite the sourcing grid as a **micro-frontend**, the sourcing grid presents metrics about different vendors to help vendor managers choose the best vendors for Amazon.
- Set up cloud infrastructure in **AWS** using **AWS CDK**, and created the UI using **React Typescript**
- Optimized performance by eliminating **Redux** and instead implementing **React Context**, resulting in faster page load.
- Improved the look and feel of the website by transitioning from the **AntD** component library to **Cloudscape**, giving the website a more "Amazonian" feel.
- Automated the development process by setting up different stages through **CDK Pipelines**.

## PROJECTS

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### SDSU Engineering GPT Assistant | *NextJS, Typescript, PostgreSQL, Langchain*

- Developed a dynamic query system that facilitates real-time user inquiries about SDSU's computer/electrical engineering department and related courses.
- Integrated **Next.js**, **Vercel AI SDK**, and **OpenAI's** embedding API for efficient query handling and context-aware responses.
- Processed PDFs into chunks stored in a **3D vector database** in **Supabase**, enabling rapid data retrieval.
- Used **LangChain** to match user queries to relevant database chunks, which are sent as embeddings to the **GPT API**.

### Healthtrack | *AWS, Typescript, React, Git*

- Led 7 students to develop a healthcare app tailored for a rural clinic's needs.
- Delivered features including Electronic Patient Record, Physician Scheduler, Lab/Pharmacy Order Tracking, Insurance Billing, and Equipment Inventory.
- Utilized technologies: **Git**, **React**, **Typescript**, **AWS Amplify**, **Cognito**, **Cloudfront**, **S3**, **DynamoDB**, and **AppSync**.
- Managed both the development and coordination of engineering tasks among team members.

## TECHNICAL SKILLS

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**Languages:** HTML, CSS, Javascript, TypeScript, C, C++, SQL, Java, Python, Matlab

**Frameworks:** React, NextJS, Flask, ExpressJS, NodeJS

**Developer Tools:** Cloudformation Templates, AWS CDK, Postman, Linux/Unix, Git, AWS, Docker, Visual Studio Code, IntelliJ, Data Structures and Algorithms