

David Jeseung Ha



Education

Vanderbilt University, Nashville TN

August, 2019 - May, 2023

Bachelor's of Science — Computer Science, Mathematics

Relevant Courses: Intermediate Software Design, Operating Systems, Programming Languages, Algorithms, Web Based Systems Architecture, Principles of Software Engineering, Artificial Intelligence, Scalable Microservices

Skills

Languages	TypeScript/Javascript, Python, Java, C/C++, HTML/CSS, SQL, GraphQL
Libraries/Frameworks	React, React Native, Next, Tailwind, Express, FastAPI, RxJava, Spring, Apollo
Other	Git, Linux/Unix, Docker, Figma, Cloud, Bash, Redux, Prisma, Pandas, PyTorch

Experience

Software Development Engineer Intern — APD Mitchell Cloud Repair

Mitchell International, Inc. — San Diego, CA

May 2022 — Oct 2022

- Built a microservice for internal tooling that deletes EMS scanned jobs with Spring Boot & RxJava. Documented code using Swagger UI & Confluence and load tested with JMeter to optimize microservice.
- Increased code coverage for a microservice that gets all repair jobs of vehicles by 15% using JUnit 5.
- Attended daily scrum meetings, updating my progress as well as assisting team members with tasks.

Intermediate Software Design TA — Team Lead Grader

Vanderbilt University — Nashville, TN

Jan 2021 — May 2022

- Co-led the HW team and ensured timely grading of assignments, quizzes, midterms, and finals.
- Assisted around 20 students weekly by holding office hours, helping them on topics including C++, OOP, and Software Design Patterns.

TradEd - Founding Engineer

Vanderbilt University — Nashville, TN

May 2021 — August 2021

- Led the development team for a startup for an E-Commerce mobile application tailored for college students.
- Implemented 10+ front-end screens using React Native & styled-components and connected it to Google Firebase and Firestore for our backend service.
- Showcased initial version of the app functionality to exec members and handed off code to other students.

Projects

Path Finding Visualizer

2023

- Craft visualized pathways on an $m \times n$ board with custom walls for algorithmic exploration using React.
- Implemented pathfinding algorithms (BFS, DFS, Dijkstra's, and A*) in Python with FastAPI.
- Integrated a CI/CD Pipeline that is triggered on every pull and push to main branch using Github Actions to format code and test frontend & backend functionalities.
- Technologies: Next, Typescript, React, Tailwind, Shadcn/ui, FastAPI, Python, Vercel, Yaml, Pytest, Cypress

Genie Bar

2023

- Ai-SaaS application utilizing models from OpenAi and Replicate to generate data from user's prompts.
- Implemented Stripe checkout session for users to subscribe to the pro plan for unlimited generations.
- Technologies: Next, Typescript, Zustand, Clerk, Prisma, MySQL, Tailwind, Shadcn/ui, Crisp, Vercel

Rent Homes

2023

- Airbnb clone where users can post, reserve, and favorite listings w/ Google, Github, and Email Authentication.
- Utilized the Leaflet API to display a map with pins for locations of listings and React-Date-Range to display a calendar where users can reserve listings. Hosted the images of listings on the cloud through Cloudinary.
- Technologies: Next, Typescript, Zustand, NextAuth, Prisma, MongoDB, Tailwind, Vercel

Musica Lover

2022

- Visualized a user's most played song and artists using the Spotify API with authorization code flow.
- Sorted tracks in their playlists based on different moods using Spotify's Audio Features Analysis.
- Technologies: React, Vite, Node, Express, Styled Components, AWS EC2