

Sean Ye



Work Experience

Front End Engineer Intern

Meta

Jun 2022 - Sep 2022

- Designed an **E2E** logging solution to precisely measure performance bottlenecks in UI requests
- Reduced network request sizes by 80% by redesigning the Node GraphQL schema
- Decreased page load times by 75% by leading the migration to a new routing framework
- Discovered and addressed existing performance issues in React components improving load times and page **interactivity**
- Created a custom testing framework with a JSON deserializer to automate GraphQL object assertions

SDE Intern

Am<u>azon</u>

GitHub | Jun 2021 - Sep 2021

- Designed and lead the development of a **Python** testing framework for the **OpenSearch** (Amazon Elasticsearch) **k-NN** plugin
- Automated the benchmarking and detection of performance regressions in the plugins CI/CD workflow preventing potential production bugs and enabling faster/robust development
- Leveraged **OO** and strong abstractions to maintain simplicity and extensibility while efficiently processing millions of documents per test
- Utilized Docker/Compose for test isolation and automated deployment; EC2 instances for scalability

Lead Front End Developer

Hollr

Aug 2020 - Feb 2022

- Developed **Chrome extension** at a startup facilitating users in streamlining the sharing of products with others such as Amazon, Netflix, Youtube
- Used React TypeScript on the frontend and Firebase/Firestore to manage user settings and endorsements

Projects

OBHub

Demo | GitHub

- Developed a mobile-first, full-stack **React** application for interactive question reading with automated judging and scorekeeping
- Designed an extensible **REST** API and PostgreSQL ORM to process over 1.5K requests per day
- Automated usual studying patterns by scoring n-gram tokenized question clues by relevance with tf-idf

Path Maze Visualizer

<u>Demo</u> | <u>GitHub</u>

- Visualized complex pathfinding and minimum spanning tree algorithms with an interactive **React** app
- Implemented 10 different algorithms including **Dijkstra**, A*, Kruskal for search and maze generation
- Utilized by 100+ students to help conceptualize and build intuition on topics in an accessible manner

Education

University of California, San Diego

La Jolla, CA

Sep 2019 - Expected Jun 2023

- B.S. Computer Science, GPA: 3.9, ACM, Tau Beta Pi
- Relevant Coursework: Software Engineering, Advanced Data Structures, Algorithms, Programming Languages, Computer Vision, Machine Learning, Search and Reasoning

Honors

National Merit Finalist • Warren Honor Society • National AP Scholar

Technical Skills

Languages: TypeScript/JavaScript • Python • Go • C/C++ • Java • Hack • HTML5/CSS3 • Haskell • SQL • Bash

Tools: GraphQL • AWS • Docker • Firebase • Git • Vim • Linux

Frameworks: React.js • Node.js • Redux • PostgreSQL • MongoDB • Relay • Jest