

Sean Ye



Work Experience

SDE Intern Amazon

GitHub | Jun 2021 - Sep 2021

- Designed and lead the development of a **Python** testing framework for **OpenSearch's** (Amazon Elasticsearch) **k-NN** plugin
- Automated the benchmarking and detection of performance regressions in the plugin's 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 Technologies

Summer 2020 - Present

- 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

Front End Developer

ACM UCSD

Fall 2020 - Present

- Helped maintain membership portal with **React TypeScript** for over 1000+ users
- Collaborated in a **Agile** team of 7 with designers and backend engineers

Projects

Path Maze Visualizer

Website | GitHub | Summer 2020

- Built **React** application to visualize different pathfinding and maze generation algorithms
- Implemented 10 different algorithms, including **Dijkstra**, A* Search, Kruskal, Prim, etc.
- Utilized in a class of 100+ to help learn and build intuition on algorithms

Todo List

Website | GitHub | Spring 2020

- Built full stack web app for storing and managing todos with user authentication and a RESTful
 Todo API
- Used **React** on the frontend with an emphasis on **Material Design** (Material-UI)
- Used Node.js / Express for API requests and MongoDB for persisting data

Generals.io Bot

GitHub | Summer 2020

- Built **Node.js** bot to play Generals.io, a fast-paced multiplayer strategy game
- Became the number one ranked bot in the 2020 season in 3 weeks

Education

University of California, San Diego La Jolla, CA

Sep 2019 - Expected Jun 2023

- B.S. in Computer Science, GPA: 3.9, Major GPA: 4.0, Tau Beta Pi
- Relevant Coursework: Software Engineering, Advanced Data Structures, Design & Analysis of Algorithms, Theory of Computation, Computer Organization & Systems Programming

Honors

National Merit Finalist

- Warren Honor Society
- National AP Scholar

Technical Skills

 $\textbf{Languages} : \texttt{TypeScript/JavaScript} \cdot \texttt{Python} \cdot \texttt{C/C++} \cdot \texttt{Java} \cdot \texttt{HTML5/CSS3} \cdot \texttt{Bash} \cdot \texttt{SQL}$

Tools / Frameworks: AWS • Docker • Firebase • Git • React.js • Node.js • MongoDB • Qt • Linux