

# Sean Ye



## **Work Experience**

SDE Intern Amazon GitHub |

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 ACM Design and backend engineers to rapidly prototype and deploy nightly

## **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.is / 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. Computer Science | GPA: 3.9 | 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**

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

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