# ALI HOUNAIN

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### EDUCATION

# University of Massachusetts Boston

Bachelor of Science in Computer Science

 $\begin{array}{c} {\rm Boston, MA} \\ {\rm Sep~2020 \text{ - Dec~2024}} \end{array}$ 

### LANGUAGES

Java, Python, SQL, Javascript, Racket, C/C++, HTML/CSS,

Tools

Docker, AWS, GCP, Flask, Node, Three.js, Microsoft Office Suite, Git, React

### Projects

## quake-topomap Three.js, Javascript, HTML

quake-topomap

- Designed and developed Quake-TopoMap, an interactive web application that enables users to easily visualize USGS earthquake epicenter data via an interactive topographic map
- Utilized **Three.js** for 3D modeling, Mapbox's API for the satellite imagery and the USGS API for real-time earthquake data

# Heatmap Visualization of Pseudo Random Number Generation Algorithms C++, Python BoxFinder

- Led team as Scrum master by leading meetings, facilitating sprints, ensuring deadlines were being met, and communicating with client to clarify requirements
- Contributed to the development of the project by implementing the Lehmer algorithm, and Shaded Relief visualization

# AshOrBrain? Javascript, HTML, CSS

AshOrBrain?

- Utilized the MBTA's API to fetch train arrival data to develop AshOrBrain?, a web application that greatly improves the commuting experience for commuters at JFK/UMASS (MBTA Red Line stop).
- Accurately calculated the track on which the Alewife train will arrive, a feature not provided by the default predictor
- Utilized JavaScript, HTML, and CSS to create an intuitive and user-friendly interface, improving the commuting experience for dozens of users

# BoxFinder Flask, Python, Javascript, Docker

BoxFinder

- Developed BoxFinder, a web application that optimizes the packaging process by providing the best box for a given item's dimensions.
- ullet Boxfinder not only reduces shipping costs for customers, but also cuts down customer wait time from new hires by up to 50 percent
- Utilized **Flask** for the backend, HTML and CSS for the frontend, **Docker** for the containerization and deployed using **Google Cloud Run**

### Work Experience

Manager

### The UPS Store

Saugus, MA

Jan 2018 - Present

- Led the onboarding process for new hires and facilitated their assimilation into our work environment.
- Managed store's inventory system, and maintained organization of supplies
- Troubleshooted and resolved issues with the store's POS system and print computers
- Deescalated situations and resolved conflicts among employees and customers
- Led several efforts to optimize workplace efficiency, such as creating BoxFinder and creating a QR code list of all items in the store that lets new hires easily scan in items into the POS