Ali Hounain

Boston, MA · ali.hounain@gmail.com · (857)-352-9044 · https://ahounain.github.io/portfolio/

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, Golang, SQL, Javascript/Typescript, C/C++, HTML/CSS,

Frameworks & Libraries

React, Next.js, Three.js, Node.js, Flask, Tailwind CSS

Tools

Docker, AWS, GCP, Git

Projects

Emotion Recognition from Speech Python, TensorFlow, Keras, Librosa, Scikit-Learn sentiment-analysis

- Developed a multimodal deep learning neural network for emotion recognition using the RAVDESS dataset
- Implemented a dual-input neural network with Convolutional and LSTM layers to extract acoustic and temporal features
- Achieved 90% classification accuracy across 8 distinct emotional states using audio and metadata features
- Integrated additional functionalities including language detection and audio transcription
- Utilized advanced signal processing techniques with librosa for feature extraction, including MFCCs, chroma features, and spectral analysis

Super BoxFinder Next.js, React, Three.js, Typescript, Tailwind CSS

superboxfinder

- Developed a web application that optimizes the packaging process at The UPS Store by providing the best box for a given item's dimensions, including diagonal fitting calculations
- Implemented a responsive front-end using React and Next.js, with 3D packing visualizations using Three.js to enhance user experience
- Super Boxfinder not only reduces shipping costs for customers, but also cuts down customer wait time from new hires by up to 50 percent

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

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 Super BoxFinder and creating a QR code list of all items in the store that lets new hires easily scan in items into the POS