Rohit Rangan

Amherst, MA · rohit.michu@gmail.com · (413)-210-9298

www.linkedin.com/in/rohit-rangan · https://rohitankit.github.io/

Education

University of Massachusetts at Amherst   Aug 2019 - May 2023
Bachelor of Sciences in Computer Science - GPA: 3.7

Relevant Coursework : Software Engineering, Databases, Artificial Intelligence, Search Engines, Computation and Algorithms, Data Structures, Operating Systems

Work Experience

Kaaenaat   Bangalore, India
Software Engineering intern   March 2018 - June 2018

- Computer Vision: Used python and OpenCV's haar cascades to implement a face detection module tailored to counting the number of people using public transport.
- Project Contribution: Adapted my face detection algorithm to vehicle detection using traffic cam footage. The algorithm I designed partially served as the foundation of their Driver Assistance System - the KROOZE product dashboard - and increased general safety for over 1000 users.
- Classification: Categorized the average time of each person's trip and their behavior and stored this data on google sheets using their API.
- Presentation: Presented the evaluated statistics using a responsive web page and graph functionalities (epoch graphing) using HTML, CSS and JavaScript.

Independent Projects

Netflix Clone   *(ReactJS, HTML/CSS, FireBase, IMDB API)*

- Created a ReactJS web app which imitates the user interface of Netflix using ReactJS functionality like Components, States and Hooks.
- Designed the movie posters and categories CSS flexbox and I used TMDB and React-Youtube APIs to find relevant movies and display their trailers when clicking on the movie.
- The web app is hosted on Firebase and provides a responsive interface to users.

PageRanker   *(Python, Wikilarge dataset)*

- Implemented a PageRank algorithm which is used in modern search engines.
- The algorithm analyzes the links from the wikilarge corpus and extracts the inlink counts for each page.
- Using the inlink counts it generates a list of the top k ranked pages and their respective PageRank scores.

Driver Distraction   *(Python, computer vision libraries - OpenCV)*

- Led a Hackathon team at HackUmass, we created an interactive computer vision application to detect driver drowsiness and distraction.
- Used Haar Cascades to identify different facial features and detect if the user's eyes are closed for a prolonged period of time.

Technical skills

Programming Languages: Java, Python, JavaScript, ReactJS, HTML, CSS, C++
Databases: postgreSQL, MySQL, Firebase, MongoDB
Development: Git, GitHub, Bash scripting, unit testing

Academic Distinctions

Serving as a Course Assistant for Introduction to Operating Systems, I debug and grade students' projects and provide feedback to further students' skills

Awarded a $48,000 academic scholarship over the course of four years for outstanding academic performance