Rahman Mian

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Programming Languages: Java, JavaScript, TypeScript, Python
Technologies: React, Angular, HTML, CSS, Redux, MongoDB, MySQL, Firebase, Firestore, Node.js, Express.js, Flask
Tools: GitHub, Git, Docker, Webpack, Figma, Tailwind CSS, PurgeCSS, SASS, WordPress

EDUCATION

University of Massachusetts Amherst   **Expected Graduation: May 2025**
BSs in Computer Science | Chancellor's Scholarship & Dean's List

WORK EXPERIENCE

Software Engineering Intern   **July 2024 –Sep 2024**
National Renewable Energy Laboratory (NREL)
- Developed an Angular app for the US Department of Energy (DOE) to help low-income jurisdictions identify overlooked buildings and enhance energy benchmarking for sustainable solution
- Created 20 Python backend endpoints using Flask, integrating MapBox and AG Grid APIs to create an editable interface.
- Integrated the application with the DOE's platform, managing 800,000+ square feet of building data and enabling Excel, JSON, GeoJSON, and CSV file uploads for compatibility with existing jurisdiction data

Web Development Intern   **Dec 2022 – Feb 2023**
Rockville Technologies
- Reduced code bloat by 10% for a telecommunications website, improving user performance through strategic script removal
- Implemented lazy loading techniques to load only visible parts of the website, improving loading speeds
- Added a Google Analytics platform to identify key metrics to monitor user traffic flow

IT Technician   **Mar 2021 - Present**
Mianwali Education Trust
- Built a responsive website for a school, highlighting the NGO's mission and offering a comprehensive for donors
- Reduced donation barriers by integrating Stripe API and local bank transfer options, leading to a 10% increase in donations.
- Consulted with the school on new computer purchases, optimizing configurations for cost savings.

PROJECTS

LeetBank|Web App|ReactJS, JavaScript, HTML, CSS, Express, Firebase, Firestore
- Built a full-stack application for storing LeetCode questions allowing coders to easily access questions
- Streamlined data fetching by implementing GraphQL requests, reducing LeetCode API calls by 83.3%
- Optimized search algorithms, cutting query time by 40% for a faster question retrieval rate

AI-Enhanced Car Simulation World Generator|GitHub Demo|ReactJS, Node, JavaScript, JSON
- Deployed 1000+ cars and a mutate function for optimization in an ML driving simulation.
- Developed UI Dashboard for users to create custom worlds, utilized JSON for local storage with DOM manipulation.
- Integrated real-world road data from OpenStreetMap via Overpass Turbo, efficiently parsing 2000+ lines of data.

ML Complex Gesture Detection|GitHub Demo|Python, Flask, JavaScript, HTML5, Tailwind CSS, ESP32, MPU6050
- Detected 6 distinct complex hand gestures using embedded systems: ESP32-S3 microcontroller and MPU6050 sensor.
- Implemented machine learning pipeline with 200+ datasets and a Data Classification Model with over 90% accuracy.
- Provided Friendly UI using a Flask Server and Watchdog API.

COURSES & CERTIFICATIONS

- Object Oriented Programming, Secure Distributed Systems, Data Structure & Algorithms, Discrete Math, Statistics, Cybersecurity
- Responsive Web Design - Free Code Camp
- BerkeleyX CS198.1x, Cryptocurrencies - University of California Berkeley
- Game Engine Development With C++ - ID tech coding and Engineering Academy