

Rahman Mian

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Programming Languages: Java, JavaScript, TypeScript, Python

Front-End: React, Angular, HTML, CSS, Redux

Back-End: 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

Bachelor of Science 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 application for the US Department of Energy (DOE), enhances building data management by 25%
- Tailor-made Python backend APIs, integrated with the DOE's energy platform for 800,000+ square feet of building data
- Constructed interactive dashboards and visualizations for effective data auditing and tracking across jurisdictions

Web Development Intern

Dec 2022 – Feb 2023

Rockville Technologies

- Optimized frontend scripts, reducing code bloat by 10% through strategic script removal, and ID-to-class conversion
- Executed lazy loading techniques to enhance loading speeds, resulting in a 9% surge in user retention
- Implemented Google Analytics platform to identify key metrics and increased conversion rate by 20%

IT Technician

Mar 2021 – Present

Mianwali Education Trust

- Engineered a responsive website utilizing modern web frameworks; resulting in a 30% surge in user email inquiries
- Revitalized IT infrastructure, elevating operational efficiency by 15% through optimized system configurations
- Implemented a robust data management system to streamline the storage of critical information for staff
- Tutoring sessions with students teaching IT and programming fundamentals

PROJECTS

AI-Enhanced Car Simulation World Generator | [GitHub Demo](#) | **ReactJS, NodeJS, 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 API using Overpass Turbo to parse 2000 lines of data

LeetBank | [Web App](#) | **ReactJS, JavaScript, HTML, CSS, ExpressJS, Firestore**

- Built a full-stack application for accessing LeetCode questions, optimizing 6 API calls into one GraphQL request.
- Designed a clean and intuitive interface featuring over 10 animations to enhance the coding practice experience
- Added intuitive search algorithms enabling users to find questions 40% faster

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

SnapTask | [Web App](#) | **HTML5, Tailwind CSS, JavaScript, Vite, ReactJS**

- Crafted ground-up Dynamic Task Manager web application aimed at optimizing user productivity
- Integrated dynamic task management features resulting in a 30% increase in user engagement

CERTIFICATIONS

Responsive Web Design

Free Code Camp

- HTML/CSS mastery in box models, media queries, pseudo-selectors, variables, and advanced transformations
- Applied dynamic design principles to complete 20 projects, including 5 certifications, 100 hours of coding experience
- Incorporated industry best practices to create responsive web applications with a strong emphasis on accessibility

BerkeleyX CS198.1x: Cryptocurrencies

University of California, Berkeley

- Blockchain History, Bitcoin Mechanics Technical Overview, Network Attacks, and Ethereum & Smart Contracts in Web3

Game Engine Development With C++

iD Coding and Engineering Academy

- Developed a 3D Snake game, showcasing strong proficiency in object-oriented design principles
- Utilized the Standard Template Library(STL) and OpenGL for data management, reducing code complexity by 30%

COURSES & OTHERS

- Object Oriented Programming(OOP), Data Structures, Algorithms, Programming Methodology, Software Development, Human-Computer Interaction(HCI), Dynamic Programming, Statistics, Discrete Math, Probability, Data Science, Machine Learning, Product Design, Information Technology, Product Management, Artificial Intelligence, Embedded Systems
- Agile, Scrum, .NET, CI/CD, RESTful API, GraphQL, AJAX, PHP, Jira, WordPress, Unity, Bootstrap, Latex, DOM