

Rahman Mian

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Languages: Java, JavaScript, TypeScript, Python, C++, C, Swift, SQL, HTML, CSS

Frameworks: React, Next, Angular, Android Studio, Node.js, Flask, WordPress, Tailwind CSS, ASP.NET

Developer Tools: Git, Jenkins, GitHub, Docker, Firebase, MongoDB, Google Cloud Platform, CI/CD, Agile, Scrum

EDUCATION

University of Massachusetts Amherst

Bachelor of Science in Computer Science

Expected Graduation: May 2025

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 solutions.
- Created **20 Python API** endpoints using **Flask**, integrating MapBox and AG Grid APIs
- Implemented compatibility with the DOE's data, 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 by **10%** for a telecommunications website, improving user performance through 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.

IT Technician

Mar 2021 - Present

Mianwali Education Trust

- Built a **responsive website** using **WordPress** for a school, highlighting the NGO's mission for donors.
- Integrated local bank transfer **API** options, leading to a 10% increase in donations.

PROJECTS

PomoPay | Full Stack App | *Next.js, TypeScript, Tailwind CSS, Google Cloud Functions, Cloud Scheduler, Firestore*

- Built a full-stack **Next.js** app that tracks users' productivity goals with dynamic **NoSQL** database management
- Implemented a weekly tracking system where users pay a forfeit amount; if goals aren't met, status is retrieved weekly using **Google Cloud Functions** and **Google Cloud Scheduler**.
- Set up a **secure payment system** using **Stripe's Payment Intents API** to offload critical information

LeetBank | Full Stack App | *React, JavaScript, HTML, CSS, Express, Firebase, Postman, GraphQL*

- Developed a full-stack **React** app for streamlining coding practice by storing, annotating, and categorizing over **3000** LeetCode 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.

AI-Enhanced Car Simulation World Generator | GitHub Demo | *React, Node, JavaScript*

- Deployed **1000+** cars and a **mutate** function for optimization in an **ML** driving simulation.
- Designed an interactive UI dashboard allowing users to create and customize virtual worlds.
- Integrated **real-world road data** from **OpenStreetMap** via Overpass Turbo, parsing **2000+** lines of data.

ML Complex Gesture Detection | GitHub Demo | *Python, Flask, JavaScript, ESP32, MPU6050*

- Detected **6** complex hand gestures using **Python** scripting and ubiquitous systems
- Implemented a machine learning pipeline with **200+** datasets and a **Data Classification** Model with **90%** accuracy.

CERTIFICATIONS

Responsive Web Design — FreeCodeCamp: Applied dynamic design principles to complete 20 web pages

Berkeley Cryptocurrencies — UC Berkeley: Blockchain History, and Ethereum & Smart Contracts in Web3.

Game Engine Development — iD academy: Coded a 3D Snake game in C++