MUHAMMAD SAIFUL ISLAM

Full-Stack Web Developer | Biogeochemist



SUMMARY

Certified web developer transitioning from an academic research background. Holding a track record of five publications in scientific journals and magazines. Experienced in supervising four students and collaborating with research groups and farms. Skilled in analyzing complex data sets comprising 10,000 to 15,000 data points using the R programming language. Proficient in mobile and web application development using HTML, CSS, JavaScript, and various frontend and backend frameworks and libraries. Passionate about crafting impactful projects that bridge social and scientific significance. Eager to continuously enhance web development skills and committed to making meaningful contributions to the field.

SKILLS

Front End Development

- HTML, CSS, JavaScript, TypeScript
- Libraries / Frameworks (React, Redux, Angular, Material, Bootstrap, SASS/SCSS, jQuery)
- Responsive design, modals and touch interaction
- AJAX & JSON
- Version Control (Git)
- Test- & Behavior-Driven-Development (unit testing, integration testing, acceptance testing, and end-to-end testing)
- Continuous Integration / Delivery
- Functional & object oriented programming
- Mobile Apps (React Native, Expo, PWA)
- UX/UI (Personas, user stories, user flows)

Back End Development

- NodeJS & Express
- APIs (JSON, RESTful, Postman)
- Hosting & Web Services (AWS, Google Firestore, Heroku, Netlify)
- Relational & non-relational databases (PostgreSQL, MongoDB)

Others

- Microsoft 365
- R (Data wrangling, Statistical analysis, visualization)
- Google Analytics

EDUCATION

Certification Full-Stack Web Development

CareerFoundry, Berlin | Jul 2023 - Jan 2024

PhD Candidate in Biogeochemistry

<u>Forschungszentrum Jülich, Germany</u> | APR 2019 -Present

Google Data Analytics Professional Certificate (Three courses)

Coursera | Sep - Dec 2021

Masters in Ecology

<u>University of Bremen</u> | Oct 2013- Apr 2018

Bachelor of Science in Zoology

<u>Jahangirnagar University</u> | Mar 2007 - Nov 2012

LANGUAGES

- Bengali (Native)
- English (Fluent)
- German (Intermediate)
- Hindi (Intermediate)

WEB DEVELOPMENT PROJECTS

MyFlix | CareerFoundry Project | Oct 2023 - Dec 2023

- Developed a RESTful API using Node.js, Express, MongoDB, and Mongoose, ensuring secure user authentication and efficient CRUD operations on 'movies' and 'users.'
- Tested the API endpoints with Postman, wrote clean and concise documentation, deployed the API with Heroku.
- Created two single-page, responsive front-end applications, one using React (following MVC design pattern) and the other Angular (with Angular Material). Users can create accounts, browse movies, manage profiles, and save their favorites.

Angular client demo - Angular GitHub - React client demo - React GitHub - API GitHub

MeetBit | CareerFoundry Project | Nov 2023

- A React-based progressive web app (PWA) showcasing events from a Google Calendar, featuring responsiveness, cross-platform functionality, offline accessibility, and the ability to add to home screens.
- Utilized a test-driven development (TDD) approach with Jest for unit and integration tests, Cucumber for acceptance tests, and Puppeteer for end-to-end testing.
- Integrated AWS Lambda serverless functions for user authentication and authorization via OAuth.
- Employed agile methodologies with a Kanban board for project management.

Meet App Demo - GitHub Repo

WORK EXPERIENCE

Graduate Research Assistant

Forschungszentrum Jülich, Germany | Apr 2019 - Apr 2023

- Designing and implementing field and laboratory studies to investigate soil processes and dynamics in different ecosystems (5 projects).
- Collecting, managing, and analyzing large datasets related to soil properties and environmental parameters.
- Collaborating with interdisciplinary teams to integrate soil science with other environmental sciences.
- Writing scientific manuscripts for publication in peerreviewed journals and presenting research findings at conferences and meetings.
- Mentoring and supervising graduate and undergraduate students involved in research projects.

Student research assistant and other part-time roles

Forschungszentrum Jülich | Daimler AG | GPS Bremen | McDonalds | Weser Kurier Bremen | Jan 2014- Mar 2019

- Setting up and maintaining experiments, collecting, analyzing, and presenting data as a student research assistant.
- Various part-time roles during master's studies involved production and customer service.

Sustainable development Liaison

Flood Hazard Research Centre (FHRC), Bangladesh | Jun- Jul 2012

- Conducted focus group discussions with 15 community organizations on climate change adaptation.
- Assisted master's students in collecting data for their thesis on sustainable development initiatives in rural community groups in Bangladesh.