Md Mobinur Rahman

Senior System Developer <u>streloy@gmail.com</u> • <u>mobinur@rimes.int</u> • <u>+8801711415554</u> <u>https://www.linkedin.com/in/streloy</u> • <u>https://www.github.com/streloy</u> • <u>https://saim.bdservers.site</u>

Summary

Experienced Full Stack Developer with a strong background in Geographic Information Systems (GIS), adept at designing, developing, and deploying innovative software solutions. Proficient in a wide range of programming languages and frameworks, with a keen eye for detail and a passion for problem-solving. Proven ability to collaborate effectively in multidisciplinary teams to deliver high-quality projects on time and within budget. Committed to continuous learning and staying abreast of emerging technologies in both software development and GIS domains.

Soft Skills

- Full Stack Development: Proficient in frontend and backend technologies including Node.js, React, Angular, Express.js, PHP, Laravel and SQL/NoSQL databases.
- Geographic Information Systems (GIS): Extensive experience with GIS tools and libraries such as ArcGIS, QGIS, GDAL, Leaflet, and Mapbox for spatial data analysis, visualization, and mapping applications.
- Web Development: Skilled in developing responsive web applications with a focus on user experience (UX) and interface (UI) design principles.
- Software Development Lifecycle (SDLC): Hands-on experience with Agile methodologies, version control systems (Git), and issue tracking tools (JIRA) for efficient project management and collaboration.
- Problem Solving: Strong analytical and problem-solving abilities, with a demonstrated track record of identifying complex issues and implementing effective solutions.
- Communication: Excellent verbal and written communication skills, with the ability to convey technical concepts to nontechnical stakeholders and work collaboratively in cross-functional teams.

Work Experience

Senior Software Developer | Jan 2020 - present

Regional Integrated Multi-Hazard Early Warning System (RIMES) | Full-time

Dhaka, Bangladesh

Technologies: NodeJS • JavaScript • Angular • React • MySQL • Leaflet • Python • NetCDF • Git

- Developed and maintained web-based GIS applications for spatial data visualization, analysis, and reporting using technologies such as React, Angular, Leaflet, and PostgreSQL/PostGIS.
- Designed and implemented RESTful APIs using Python, Django, NodeJS, Express Js to facilitate communication between frontend and backend systems, ensuring seamless integration of GIS functionalities.
- Collaborated with cross-functional teams to gather requirements, define project scope, and deliver solutions that meet client needs and project objectives.
- Optimized application performance through code refactoring, database tuning, and caching strategies, resulting in improved responsiveness and scalability.
- Conducted code reviews, automated testing, and continuous integration (CI/CD) to uphold code quality standards and ensure robustness and reliability of the software products.

Application Developer | Sep 2017 - Dec 2019 • 2 Years 3 Month

Navana Group | Full-Time

Dhaka, Bangladesh

Technologies: NodeJS, Angular • PHP • Oracle11g • MsSQL • JavaScript

- Worked on a large-scale Angular project, contributing to the development of key features
- Collaborated with UI/UX designers to translate design concepts into functional web applications
- Implemented state management using RxJS observables for efficient data flow
- Conducted performance optimization techniques to improve application speed and responsiveness
- Worked with the QA team to identify and fix bugs during the testing phase
- Assisted in the deployment and maintenance of applications on production servers.

Software Developer | Jul 2015 - Aug 2017 • 2 Years 1 Month

Synergy Interface Ltd. | Full-Time

Dhaka, Bangladesh

Technologies: NodeJS • PHP • MySQL • MSSQL • JavaScript

- Developed a real-time chat application using Node.js for the backend and Angular for the frontend. Implemented WebSocket communication for instant messaging functionality.
- Designed and implemented RESTful APIs using Express.js to handle CRUD operations for user authentication, messaging, and file uploads.
- Implemented JWT-based authentication and authorization to secure API endpoints and protect sensitive data.
- Developed a data visualization dashboard using JavaScript libraries such as Highchart.js or D3.js, with MSSQL as the backend database.

Education

Bachelor's degree: Computer Science & Engineering

Daffodil International University, Dhaka Dhaka, Bangladesh Grade/GPA: 3.35/4.00

Higher Secondary School Certificate: Science

Nawabganj Govt. College, Chapai Nawabganj Chapai Nawabganj, Bangladesh Grade/GPA: 4.60/5.00

Secondary School Certificate: Science

Harimohon Govt. High School, Chapai Nawabganj Chapai Nawabganj, Bangladesh Grade/GPA: 5.00/5.00

Projects

1. National Livestock Advisory System [NLAS]

Technology used: Angular, NodeJS, Python, NetCDF, PHP, Leaflet, MySQL, Git

The <u>Livestock Advisory System (NLAS)</u> Web Application is a cutting-edge platform developed under the <u>World Bank CARE</u> project, funded by the <u>World Bank</u>, to provide comprehensive advisory services to livestock farmers. Leveraging **Angular** for frontend development, **Python Django** framework for backend functionality, and **Leaflet.js** for map visualization, this application offers an intuitive and interactive user experience. By harnessing the power of modern web technologies and spatial data visualization, the platform aims to empower livestock farmers with actionable insights and guidance to improve their productivity and livelihoods.

2. Rapid Portal

Technology used: Angular, NodeJS, Python, NetCDF, PHP, Leaflet, MySQL, Git

The RAPID Web Application represents a pioneering initiative developed under the SUFAL-II project, funded by the European Union, to revolutionize agricultural planning and implementation in rural communities. Built on Angular for frontend development, Python Django framework for backend functionality, and Leaflet.js for map visualization, this innovative platform empowers stakeholders with actionable insights and decision-making tools to enhance agricultural productivity, sustainability, and resilience.

3. Integrated Forecast Dissemination Portal (INSTANT)

Technology used: CodeIgniter 3, Python, NetCDF, Leaflet, MySQL, Git

The portal is developed under the **Disaster Risk Management** in Cox's Bazar' project of **UNDP** supported by Swiss Agency for Development and Cooperation (**SDC**), European Union Civil Protection and Humanitarian Aid (**ECHO**) and from the **People of Japan** with technical support from Regional Integrated Multi-Hazard Early Warning System (RIMES) in collaboration with Bangladesh Meteorological Department (**BMD**). Leveraging PHP Codelgniter 3 for frontend development, Python Django framework for backend functionality, and Leaflet.js for map visualization, this innovative platform provides near-real-time weather forecasts and hazard assessments to support disaster preparedness and response efforts in Cox's Bazar and surrounding regions.

2012 - 2016 • 4 years 1 month

2008 - 2010 • 2 years 0 month

2007-2008 • 2 years 0 month

4. Disaster Management Committee Portal

Technology used: NodeJS, Angular, Leaflet, MySQL, Git

The portal is developed under the **Promote Resilience of Vulnerable through Access to Infrastructure, Improved Skills, and Information (PROVATi3)** project of **Department of Disaster Management** financed by the International Fund for Agricultural Development (**IFAD**) with technical support from Regional Integrated Multi-Hazard Early Warning System (**RIMES**). Leveraging Angular 14 for frontend development, NodeJS express framework for backend functionality, and Leaflet.js for map visualization.

5. Flood Forecasting & Warning Centre (FFWC)

Technology used: Angular, NodeJS, Python, NetCDF, Leaflet, MySQL, Git

The FFWC Web Application is a cutting-edge platform developed under the <u>World Bank CARE</u> project, funded by the <u>World Bank</u>, to provide comprehensive advisory services to livestock farmers. Leveraging **Angular** for frontend development, **NodeJS Express** framework for backend functionality, and **Leaflet.js** for map visualization, this application offers an intuitive and interactive user experience. By harnessing the power of modern web technologies and spatial data visualization, This system can predicting when and where floods are likely to occur, people can take proactive measures to prepare for the event, such as evacuating flood-prone areas, moving valuable belongings to higher ground, and reinforcing flood defenses and it can include building flood barriers, implementing zoning regulations to limit construction in flood-prone areas, and developing emergency response plans.

Certifications & Awards

٠	NWP Data Processing, Preparation and Visualization - Bangladesh Meteorological Department	January 2020
٠	Introduction to Data Science	December 2023
•	Data Analytics Essentials	December 2023

Languages

- Bengali (Native or bilingual proficiency)
- English (Full professional proficiency)