



Jahir Ahmed

Backend Engineer · GIS & Early Warning Systems · Infrastructure

📞 +880-1991-339009 | 🌐 jahirahmed.com

✉ me.jahirahmed@gmail.com | 🔗 linkedin.com/in/jahir509

🐙 github.com/Jahir509 | 📝 medium.com/@me.jahirahmed

📍 11/C Mirbagh, Hatirjheel, Dhaka-1217

Summary

Backend Engineer with 6+ years building scalable web applications, GIS-based decision support systems, and real-time early warning platforms for government and international agencies across Bangladesh, India, and Timor-Leste. Strong end-to-end delivery across Angular, Python/Django, and Node.js, with deepening expertise in DevOps and self-hosted infrastructure — Proxmox virtualization, reverse-proxy setups, container orchestration, and Linux server administration.

Technical Skills

Languages: Python, JavaScript, TypeScript

Frontend: Angular, PrimeNG, Ng-Zorro, Leaflet, Mapbox, Turf.js, Bootstrap, HTML, CSS

Backend: Django, Django REST Framework, Node.js, Express.js

Databases: MySQL, PostgreSQL/PostGIS, MongoDB, Redis

Infrastructure & DevOps: Proxmox, Docker, Kubernetes (RKE2), HAProxy, Keepalived, Nginx, Cloudflare Tunnel, AWS, Nexus, Git, CI/CD, Linux administration

GIS & Data: Spatial data processing, GeoJSON, NetCDF, satellite & hydro-meteorological pipelines, zonal statistics

Experience

Full Stack Developer

Oct 2023 – Present

Regional Integrated Multi-Hazard Early Warning System (RIMES)

Dhaka, Bangladesh

- Engineered decision-support and early warning systems (landslide, cyclone, flood, weather) for government agencies across Bangladesh, India, and Timor-Leste, integrating GIS and satellite weather data into real-time disaster insights.
- Built automated geospatial pipelines in Python processing NetCDF precipitation data (MSWEP + HRES) with rolling accumulation windows, combining rainfall forecasts with terrain susceptibility to drive threshold-based landslide warnings.
- Worked closely with the infrastructure team to set up and configure three self-hosted Proxmox + RKE2 Kubernetes clusters (staging, production, management), including two-bridge NAT networking, reverse proxy, and HAProxy + Keepalived high availability behind a single public IP.
- Delivered training to government agencies (BMD, DDM, FFWC) on early warning system usage, increasing technology adoption by 40% and strengthening institutional capacity for climate-resilient decision-making.

Programmer

Apr 2021 – Sept 2023

belivIT (Sister Concern of OMICON Group)

Dhaka, Bangladesh

- Built and maintained Angular admin dashboards and MEAN-stack backends for e-commerce and event-management platforms, streamlining inventory, order, and content workflows.
- Refactored Node.js and Express APIs across multiple projects, reducing server response latency by 35% and improving maintainability.

Associate Software Engineer

Sept 2020 – Mar 2021

AITs Genesis

Dhaka, Bangladesh

- Developed Angular-based ERP and POS systems as part of a product team, streamlining finance, inventory, and HR workflows — driving up to 40% improvement in data accuracy, 25% faster checkout, and a 15% increase in sales.
- Engineered a high-performance product website for Jain Laboratories Ltd. with Angular, Tailwind CSS, and Figma — achieving efficient load times and cutting bounce rate by 40% through optimized UI and rapid prototyping.

Full Stack Developer (Remote, Part-Time)

Mar 2020 – Aug 2020

Atsiom LLC

United States

- Developed responsive Angular UI for an occupational-health SaaS platform, covering employee scheduling, drug-testing results, and employer-portal dashboards.
- Built Django REST APIs powering digital service authorizations, automated result delivery, and corporate invoicing workflows.

Assistant Software Engineer

Millennium Information Solution Ltd.

Feb 2019 – Feb 2020

Dhaka, Bangladesh

- Contributed to a leading Shariah-compliant Islamic core banking platform through testing, debugging, and issue tracking to improve system reliability.
- Developed Angular UI modules modernizing internal interfaces, improving usability for banking staff across client institutions.

Selected Projects

INSTANT – Integrated Forecast Dissemination Portal | *CodeIgniter, Leaflet, Python, PHP, Linux*

- Partnered with NASA and the RIMES team to integrate the Global Landslide Hazard Assessment Model (LHASA), delivering a threshold-based landslide early warning system for Bangladesh's hill regions – now the primary early warning system for the Cox's Bazar region.
- Automated ECMWF and BMD WRF weather processing (9km and 3km resolution) and cyclone-track generation, enabling high-resolution localized forecast dissemination across South Asia.

TNSMART – Tamil Nadu Multi-Hazard Preparedness System | *Angular, PrimeNG, Turf.js, Leaflet, Linux*

- Developed cyclone, flood, inventory, volunteer, and emergency-response modules for a state-wide GIS disaster-management platform serving Tamil Nadu, India, with the RIMES India team.
- Co-designed the frontend architecture and UI redesign, and extended the drought module with NDVI, NDWI, and vegetation indices for proactive agricultural risk monitoring.

NLAS – National Livestock Advisory System | *Django, Python, Angular, Leaflet*

- Built the Django backend and weather-integrated advisory logic delivering real-time livestock guidance, exposed via REST APIs consumed by both mobile and web apps.
- Now used as a primary advisory tool by Bangladesh government officials for national livestock and agricultural management.

Boibazar.com – Bangladesh's Largest Online Bookstore | *Angular, Node.js, Express, MongoDB*

- Built the Angular admin dashboard and optimized MEAN-stack APIs for product search, order processing, and nationwide delivery management.

Synchromedics & OccMarket – Occupational Health CRM / Marketplace | *Angular, Ng-Zorro, Django, DRF*

- Architected reusable Angular frontends for clinic and employer workflows, and built DRF APIs for provider search, service requests, and employer-clinic matching.

Ababil & Ababil NG – Shariah-Compliant Core Banking Platform | *Angular, PrimeNG, TypeScript, JavaScript*

- Monitored and analyzed core banking system issues, prepared test and validation reports, and managed the full bug lifecycle from identification through deployment and closure.
- Modernized legacy UI modules into Angular with PrimeNG, supporting the transition to the next-generation core banking platform.

Education

Advanced Certificate for Management Professionals (ACMP)

Institute of Business Administration (IBA), University of Dhaka

2025

Dhaka, Bangladesh

B.Sc. in Computer Science & Engineering – CGPA: 3.08/4.00

United International University

2019

Dhaka, Bangladesh

Higher Secondary Certificate – GPA: 5.00/5.00

Ichamoti Degree College

2013

Dhaka, Bangladesh

Secondary School Certificate – GPA: 4.94/5.00

Agla Chowkighata J.M High School

2011

Dhaka, Bangladesh

Certifications

CKA – Certified Kubernetes Administrator

KodeKloud

In Progress – Expected 2026

References

Available upon request.