Habibul Hasan

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Head of Engineering with 10+ years of experience building and scaling large-scale software products. Currently leading backend, cloud, and AI infrastructure for an EdTech platform serving 500,000+ students, while running a technology consultancy (PocketIO) delivering cloud, DevOps, and full-stack solutions for sports tech, EdTech, and SaaS clients. Deep hands-on expertise in microservices, Docker, Kubernetes, AWS/Azure/DigitalOcean, video streaming, and LLM/RAG-based AI systems. Previously architected microservices that increased profit by 20%.

WORK EXPERIENCE

Innospace Infotech Ltd. (Brritto — EdTech) **May 2025 – Present**

Head of Engineering — Backend, Cloud & AI Infrastructure *Dhaka, Bangladesh*

- Leading backend, cloud, and AI infrastructure for Brritto, an exam-preparation EdTech platform serving 500,000+ students and rendering millions of questions through the mobile app.
- Scaled the question-rendering and live/mock exam infrastructure on AWS with RabbitMQ-based asynchronous processing, keeping the platform highly available under peak exam-time load.
- Driving AI adoption across the product: architected RAG pipelines with LLMs on cloud infrastructure for intelligent question generation, doubt-solving, and personalized learning.
- Leading and mentoring the engineering team across backend, DevOps, and AI workstreams; aligning technical roadmap with business goals.

PocketIO — Technology Consultancy (own practice) **2023 – Present**

Tech Lead Consultant — DevOps, Node.js, Microservices (run in parallel with full-time roles) *Remote*

- *Selected client engagements:*
- **SportiNerd (Sports Tech):** Architected and delivered a highly available cloud backend and technology infrastructure for a real-time sports platform (live scores, analytics, fan engagement), designed for spiky match-day traffic.
- **PocketSchool (EdTech):** Built the technology infrastructure end to end on a modern stack (Node.js/NestJS, React, Docker, Kubernetes, AWS) — payment integration, secure video streaming with ffmpeg/H.264/H.265 and S3, and student onboarding including cross-border onboarding flows. Developed a dynamic on-the-fly video watermarking solution at 2x lower cost than existing providers.
- **WhatsMonk (SaaS — whatsmonk.com):** Built a WhatsApp CRM platform serving 500+ businesses — unified team inbox, message automation, broadcast campaigns, and analytics — shipped in both cloud SaaS and self-hosted editions with WhatsApp Business API and REST/Zapier integrations.
- Across engagements: reduced CI/CD costs by 30% with GitHub Actions and custom Linux runners, and cut cloud spend by 18% through open-source, in-house DevOps solutions on AWS.

Raena **2022 – 2023**

Lead Software Engineer — Python, NestJS (Remote) *Abu Dhabi, UAE*

- Incorporated NestJS for backend and React with Redux for frontend; seamlessly integrated 5 microservices through RabbitMQ and Redis, optimizing customer support operations.
- Architected a robust data-migration pipeline in Python, delivering a 90% reduction in manual data-entry labor.
- Deployed a logistics cost-optimization system integrating three major logistics partners, cutting last-mile delivery costs by 20%.
- Provided transparent project updates to stakeholders, aligning engineering efforts with business objectives.

Priyo **2021 – 2022**

Senior Software Engineer (Remote) *Dhaka, Bangladesh*

- Led and supervised a 10-member team and codebase using Jira, Notion, and regular ceremonies as part of daily operations.
- Orchestrated the design and development of internal messaging platforms with Node.js, Socket.IO, TypeScript, MongoDB, and React.
- Created a universal data-submission frontend framework that streamlined data collection across the organization and eliminated the need to build new forms.

Shohoz **2019 – 2021**

Software Developer (Hybrid) *Dhaka, Bangladesh*

- Led a 5-member team to deliver the Shohoz Food web experience using React, Redux, TypeScript, Node.js, HTML, and CSS.
- Designed and built an internal notification system with .NET Core SignalR, lowering cross-team communication delays by 50%.

- Cut operational time by 22% by developing a dispatcher panel with .NET Core, TypeScript, Angular, and Socket.IO.

IMS Health **2016 – 2018**

Software Developer *Dhaka, Bangladesh*

- Programmed a highly scalable business-analytics subscription portal for international pharmaceuticals on ASP.NET MVC; cut report-generation time by 40%.
- Developed advanced analytics tools with Python, Node.js, and SQL enabling real-time visualization and predictive modeling; improved decision-making accuracy by 25% and halved time-to-insight.

TECHNOLOGIES & LANGUAGES

Languages: JavaScript, TypeScript, Python, C#, Java, SQL

Technologies: Node.js, NestJS, React, Redux, ElectronJS, .NET, MySQL, PostgreSQL, MongoDB, Redis, RabbitMQ, Docker, Kubernetes, AWS, Azure, DigitalOcean, GitHub Actions, Jenkins, Linux, ffmpeg

AI / Data: LLM integration, RAG pipelines, predictive analytics

Other: System Design, Microservices, REST APIs, CI/CD, Data Structures, Team Leadership

EDUCATION

American International University-Bangladesh (AIUB) **2012 – 2015**

B.Sc. in Computer Science *Dhaka, Bangladesh*

- Awarded merit-based scholarship; graduated with CGPA 3.88 / 4.00.
- Engineered a research-based student dropout prediction system using machine learning, helping improve retention efforts across the institution.