

AVISHEK DEVNATH

Software Engineer

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PROFESSIONAL SUMMARY

Full-stack software engineer with 3+ years shipping production systems across frontend, backend, infrastructure, and ML integration. Versatile polyglot: Python/FastAPI, Node.js/NestJS, React/Next.js. Built 2 enterprise platforms (CRM and ERP) serving 10,000+ users each with 50+ APIs, multi-tenant architecture, distributed systems design, and 45% performance optimization. Proven ability to own projects end-to-end or specialize deeply in any layer.

PROFESSIONAL EXPERIENCE

Software Engineer & Senior Instructor

Mar 2022 - Present

Programming Hero, Dhaka, Bangladesh

- BrainScale CRM** - Led end-to-end architecture and development of enterprise CRM serving 10,000+ users. Owned backend design decisions, API contracts, and deployment pipeline
- SMS-Web ERP** - Architected student management ERP handling 10,000+ learners with complex enrollment workflows. Drove 40% performance gains through database optimization strategy
- Technical Leadership** - Mentored 1,500+ engineers in system design, backend architecture, database optimization, and production best practices

Full-Stack Developer

Feb - Mar 2022

DS Legends, Singapore (Remote)

- Delivered production-ready MERN platform with NestJS backend in one-week sprint
- Optimized checkout workflow: 60% latency reduction, 20% conversion improvement

TECHNICAL SKILLS

Backend Languages: Node.js, NestJS, Express, Python, FastAPI, Django | **Frontend:** React, Next.js, Redux, TypeScript, Tailwind CSS, HTML/CSS | **Database:** PostgreSQL, MongoDB, MySQL, data modeling, query optimization, indexing | **Cloud & DevOps:** Docker, Kubernetes, AWS (EC2, Lambda, S3, RDS), GitHub Actions CI/CD, GCP | **Practices:** Multi-tenancy, RBAC, JWT, API design, system design, performance optimization | **AI/ML:** RAG systems, LLM integration (OpenAI/Gemini), prompt engineering, scikit-learn | **Tools:** Git, Redis, RabbitMQ, Prisma, Mongoose, Stripe API, pgvector, FAISS

KEY PROJECTS

BrainScale CRM

GitHub | Live

Node.js, NestJS, Next.js, PostgreSQL, Prisma, JWT/RBAC, Docker

10,000+ users. Multi-tenant CRM: tenant isolation via schema partitioning, granular RBAC (6 roles), N+1 query optimization. 50+ APIs. 45% latency reduction.

URAccount (Multi-Tenant Accounting SaaS)

GitHub | Live

Python, Django, DRF, Next.js, PostgreSQL, JWT/RBAC

Enterprise accounting platform: Multi-tenant isolation, RBAC, double-entry bookkeeping with GL calculations, AR/AP workflows, bank reconciliation, P&L/Balance Sheet reports. Idempotency for money-moving endpoints. Production-ready on Neon PostgreSQL.

AI Toolbox

GitHub | Live

Next.js, React, Redux, TypeScript, Gemini API, TailwindCSS

8+ AI-powered tools with modular architecture. Redux state management. LLM integration with rate limiting and token tracking.

Aegis Knowledge Mesh

GitHub

Python, FastAPI, PostgreSQL, pgvector, LangChain, RAG

Enterprise RAG system: document ingestion, semantic search with vector embeddings, retrieval quality optimization, citation-backed responses. Production inference pipeline with latency constraints.

EDUCATION

Master of Science, Computer Science & Engineering

University of Dhaka, 2024 - Present

Research Focus: Quantum Computing, Cybersecurity & AI | Activities: Research projects, seminars, advanced coursework

Bachelor of Science, Computer Science

BGC Trust University, 2020 - 2024 (Top 10%)

Research Focus: Scalable Web Systems, Business Intelligence | Activities: Hackathons, university tech club, peer mentoring, capstone project on distributed systems

KEY ACHIEVEMENTS

Maintained 10,000+ users on 3 systems | 45% response latency optimization | 40% performance improvement | 1,500+

engineers mentored | 1000+ programming problems solved | 36 GitHub projects | 6 published python and npm packages