Farhad Al-Amin Dipto

Dhaka, Bangladesh | +8801790747718 | alaminfarhad27@gmail.com
Portfolio | GitHub | LinkedIn | Live: ScholarAI | YouTube (Demos)

Target & Summary

Target: Software Engineer, Applied — Emerging Talent (2026)
I ship **end-to-end** product features with **React, Python (FastAPI), and Postgres**, optimizing for **latency, reliability, and observability**. I talk to users, iterate quickly, and own code from design → deploy → runbooks/on-call.
Available June 2026 | Willing to relocate to San Francisco/Seattle | Requires U.S. work authorization (sponsorship)

Skills Aligned to the Role

Frontend/Backend: React, Next.js, TypeScript/JavaScript; Python (FastAPI/Flask), Java (Spring Boot), Node.js/Express; REST; pagination, rate limits, idempotency
Data/Infra: PostgreSQL/MySQL (schema, indexing, transactions), Redis caching, RabbitMQ; basic analytics instrumentation
Systems/Quality/Security: Docker & Docker Compose, GitHub Actions CI/CD; health checks, structured logs/traces/metrics, feature flags/rollback; JWT/OAuth2, RBAC

Education

Bangladesh University of Engineering and Technology (BUET) — B.Sc. in Computer Science & Engineering
Expected May 2026

Experience & Selected Projects

ScholarAI — Co-founder & Full-Stack Engineer   Org | Meta | Docs | AI-Agents | Live

- Built an **AI-powered research platform** as a containerized microservices system: **Next.js** frontend; **Spring Boot (Java)** core APIs; **FastAPI (Python 3.11)** services; data/infra with **PostgreSQL**, **Redis**, **RabbitMQ**. Orchestrated via a **meta** repo and **Docker Compose** across **14** repos.
- **Ownership (team of 2):** Led the **AI agents (FastAPI)** and platform **CI/CD & Docker Compose** orchestration; drove Kanban (GitHub Projects), PR reviews, and cross-repo releases.
- Shipped end-to-end workflow: multi-source **paper search** (*paper-search*), **PDF/metadata extraction** (*extractor: GROBID, Nougat, Tesseract OCR, Table Transformer*), **gap analysis** with Postgres (*gap_analyzer*), **contextual Q&A**, **AI-assisted LaTeX editor**, citation manager, and **pre-submission review**.
- **Production posture: GitHub Actions** CI (lint/test/build/publish), multi-stage Docker images, env config/secrets, container logs, and health/docs endpoints; disciplined issues/PRs on GitHub Projects.
- **Reliability & safety:** async jobs via **RabbitMQ**, hot-path caching with **Redis**, input validation and basic content-safety checks for LLM features to reduce failure modes and keep the UI responsive.
- Public beta on **Azure VM**: scholarai.me. AI usage limited to manage token costs; tracked issues to closure (bug → fix → deploy).
- **Demo:** 2:13 product tour (no voice, English captions) — Demo (2:14) | Full Demo (42:00).

Realtime Collaboration Tool — React + FastAPI + Postgres

Collaborative editing with presence indicators and optimistic UI; designed REST endpoints and DB schema with indexes; added feature flags and rollback.

Veridica — Content Verification (Algorand)   Live | Code

On-chain signature/ownership proofs; secure wallet callbacks; idempotent webhooks; containerized deploys.

Quantum Playground — Python, Qiskit, Streamlit   Live | Code

Interactive demos of Grover, QAOA, Deutsch–Jozsa with parameter sweeps and cached computation.

Awards & Highlights

- **2nd Prize — CQhack25 Quantum Computing Hackathon**   2025
- UAP Hackathon (Social Impact)   2025 | Bolt Global Hackathon participant