Areeb Ahmed Shariff

Software Engineer

+91 95913 07017

Website areeb.dev
Email areebshariff@acm.org
GitHub github.com/areebahmeddd
LinkedIn linkedin.com/in/areebahmeddd

EDUCATION

Monash University
2027 – 2029
Master of Business Administration
Kuala Lumpur, Malaysia

Dayananda Sagar College of Engineering
2022 – 2026
Bachelor of Engineering, Computer Science
Bengaluru, India

SKILLS

Languages: Python, Go, Bash
Certifications: Certified Kubernetes Administrator (CKA), AWS Certified Solutions Architect (SAA)
Frameworks: Django, FastAPI, Celery, Pytest, Pydantic, SQLAlchemy, Alembic, SocketIO, Streamlit
Developer Tools: Docker, Kubernetes, Helm, OpenTofu, Ansible, Kafka, GitHub Actions, Monitoring, GitOps

EXPERIENCE

Open Healthcare Network
Jan 2026 – Jun 2026
DevOps Intern
Kochi, India (On-site)

- Cut cloud costs by **60%** by migrating a Kubernetes deployment from Google Cloud to EC2 on **Docker Swarm**.
- Automated static frontend delivery with **Terraform** on Google Cloud Storage, behind a CDN, ALB and SSL.
- Scripted backend deploys to **Azure Container Apps** in Bash, with PostgreSQL, Redis and S3-compatible storage.

NeoSapien
Oct 2025 – Dec 2025
Backend Intern
Bengaluru, India (On-site)

- Lowered CER and DER of the **Gemini + PyAnnote** speech-to-text pipeline via context engineering and custom evals.
- Migrated **10+** Express.js endpoints to **FastAPI**, with Pytest unit and integration tests passing CI.
- Prototyped a **React** Chrome extension in **24 hours** to bring Neo 1 to online meetings with live audio streaming.

Embeddings Corporation
Mar 2025 – Jun 2025
Software Consultant
San Francisco, USA (Remote)

- Developed a RAG agent with **Pydantic AI** that streams responses in real time, crawling sitemaps with **Crawl4AI** and chunking content by code blocks and paragraphs.
- Built a knowledge base API with **Gemini 2.5 Pro**, nomic-embed-text embeddings and **Supabase** vector search.
- Wrote **infrastructure documentation** with self-hosting and deployment guides for AWS.

PROJECTS

Airhop
White Paper
React Native, TypeScript, Kotlin, Swift, Rust, Nostr, Cashu

- Built an offline-first, end-to-end encrypted messenger on an open **Bluetooth mesh protocol**, relaying up to **7 hops** with ID-based dedup, adaptive relay jitter and gossip sync.
- Implemented **Noise XX** and a **Double Ratchet** on audited @noble primitives, with forward-secret offline couriers.
- Added **Bitcoin** payments via **Cashu** ecash over Bluetooth with DLEQ checks, plus a Nostr fallback over **Tor**.

Airlink
White Paper
ESP-IDF, C, FreeRTOS, NimBLE, LoRa, Monocypher

- Engineered **ESP32** relay firmware that forwards Airhop mesh traffic unread, verifying **Ed25519** signatures.
- Rebuilt a **LoRa** link between nodes with **selective-repeat ARQ** that holds up under **30%** simulated loss, and a reset-proof duty-cycle ledger for **5** regions.
- Fit the relay in **120 KiB** of RAM with a cuckoo dedup filter, hardened with **Secure Boot**, signed OTA and fuzzing.

ACHIEVEMENTS

Open source: Maintainer at Open Food Facts
Scholarships: LiFT Scholarship, The Linux Foundation; selected for ACM Winter School, IIT Ropar
Hackathons: 5x winner, including 1st Place at Sentinel Hackathon and 2nd Place at BMSCE Ideathon