

Backend engineer turned SRE with **4 years** of keeping JVM and containerized services running at scale. I own service health, troubleshoot runtime and performance issues across **JVM internals**, the **Linux kernel**, and the **network stack**, and automate away toil.

EXPERIENCE

THERAP BD LTD.

Sep 2022 – Present

Application Operations & Reliability Engineer II

Dhaka, Bangladesh

Part of Therap Services LLC (USA) — Electronic health records for the US disability services sector

Release Engineering:

Own production release cycles across **30+ JVM and Dockerized services** handling **millions of daily requests**, including Raft-backed consensus clusters. Handle deployment ordering, canary releases, smoke tests, and rollbacks.

Observability:

Own Datadog APM, dashboards, and alerting across **40+ services**. Co-architected the log pipeline (Vector → Kafka → Falcon LogScale) with Grafana dashboards. Reduced **MTTD from days down to under 5 minutes**.

Production Debugging:

Dig into JVM internals with JFR, read Wireshark captures, and trace from symptoms to root cause at the Linux level — fd leaks, thread pool exhaustion, page cache thrashing. Most incidents **resolved within 1–2 hours**.

Distributed Systems:

Manage Hazelcast and Oracle Coherence clusters in production. Identify split-brain scenarios, diagnose quorum and merge-policy gaps.

Incident Response:

On-call rotation owner. Run **blameless postmortems** and chaos engineering game days.

ML Infrastructure:

Own vLLM-based model serving for internal use, with JVM client integration.

Dhaka University of Engineering & Technology — BSc in Computer Science & Engineering

Apr 2018 – Aug 2022

TICKETBD

Feb 2016 – Aug 2017

Backend Developer (Pre-University)

Dhaka, Bangladesh

Concurrency & Scale:

Built the reservation engine around a MySQL claim table with row-level locking, **preventing double-bookings** during flash sales. Took the backend from prototype to production at **commercial scale**.

PROJECTS

Custom Raft Consensus Engine | Python 3, Network Sockets, RPC [GitHub]

Implemented an independent Raft consensus engine from the **Ongaro-Ousterhout specification** — leader election, log replication, heartbeat broadcasting — and validated **state-machine safety and partition survival** under simulated split-brain faults.

Encrypted FUSE Filesystem - sec_fs | C, FUSE3, Linux VFS [GitHub]

Built a lightweight FUSE3 filesystem in C that **transparently encrypts data on write and decrypts on read**, designed for secure storage of secrets and keys. Undergraduate thesis at DUET.

SKILLS

Systems & Infra:

Linux (systemd, Syscalls, VFS, Page Cache, perf/ftrace, eBPF), Kubernetes, Docker, Nginx, JVM (GC tuning, JFR, JMX, Thread Dumps)

Distributed & Cloud:

Raft, Kafka, Hazelcast, Oracle Coherence, AWS, Oracle Cloud

Languages:

Go (Goroutines/Channels), Python (Multiprocessing/C-API), C, C++, Bash, SQL

Networking:

TCP/IP, DNS, TLS, Socket I/O, Wireshark, F5 BIG-IP LTM

Observability:

Datadog (APM, Monitors, Dashboards), Vector, Falcon LogScale, ELK Stack, Prometheus, Grafana

CI/CD & Automation:

Jenkins, Ansible, Git, Shell scripting, Release pipelines

EDUCATION

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