

Sohrab Hossain

Cyberjaya, Selangor | sohrab@sohrabhossain.com | 0142365870 | sohrabhossain.com | github.com/lshihab | linkedin.com/in/sohrabhossain-6824541a8

SKILLS

Cloud & Infrastructure: AWS (EC2, VPC, EKS, RDS, S3, IAM, ALB, CloudWatch, ECR, Secrets Manager, SSM Parameter Store), Terraform (modules, remote state, multi-environment)

Kubernetes & GitOps: Kubernetes (Deployments, Services, Ingress, ConfigMaps/Secrets, RBAC), Helm, Kustomize, ArgoCD (App-of-Apps, sync hooks), External Secrets Operator

CI/CD & Automation: GitHub Actions, OIDC-based cloud authentication, Trivy vulnerability scanning, Docker (multi-stage builds)

Monitoring & Observability: Prometheus, Grafana, kube-prometheus-stack, ServiceMonitor-based application metrics

Web & Backend: FastAPI, SQLAlchemy, Alembic, Pytest

Databases: PostgreSQL, MySQL, SQLite

Scripting: Bash, Python

Operating Systems: Linux (Ubuntu/Debian, systemd, permissions, file management)

Languages: English: Conversational proficiency, Bangla: Native speaker

EDUCATION

High School Diploma

Narsingdi Public College | 09/2020 – 12/2022 | Narsingdi, Dhaka, Bangladesh

CERTIFICATES

Certified Kubernetes Administrator (CKA) — The Linux Foundation • 2026

AWS Certified Solutions Architect – Associate — Amazon Web Services (AWS) • 2025

PROJECTS

Self-Service GitOps Platform on AWS EKS

Terraform, AWS (EKS, VPC, RDS, IAM/Pod Identity, ECR), ArgoCD, Helm, Checkov

Repos: [infra](#) · [gitops](#)

- Designed a self-service internal platform on EKS where onboarding a new application requires zero changes to the platform's own Terraform — only a single ArgoCD Application manifest added to a separate GitOps repository, which the platform's app-of-apps root automatically discovers and syncs.
- Provisioned the platform across four independently-staged Terraform modules (VPC, EKS, RDS, Addons), passing cross-stack values through AWS SSM Parameter Store instead of Terraform remote state.
- Gated infrastructure changes in CI with Checkov and tfLint static analysis plus plan-time scanning, posting Terraform plans as pull request comments prior to apply.
- Bootstrapped ArgoCD via Terraform using an app-of-apps pattern; the resulting platform provides ALB ingress, External-Secrets-based secret injection from AWS Secrets Manager/SSM, and a Prometheus/Grafana monitoring stack ready for any onboarded application to consume without further setup.
- Scoped IAM narrowly per function — a dedicated least-privilege OIDC role for CI image pushes and individual Pod Identity associations per platform service — rather than broad, shared credentials.

Simple Social — Cloud-Native Social Platform

FastAPI, PostgreSQL, Docker, Kubernetes, GitHub Actions, Trivy, Pytest

Repo: [simple-social](#)

- Built a full-stack FastAPI social platform (feed, posts, comments, likes, follows) on async SQLAlchemy/PostgreSQL, containerized with a multi-stage Docker build that trims dev-only dependency groups and excludes lockfiles from the runtime stage — a ~14% image size reduction (297MB → 255MB).
- Wrote a Pytest suite with SAVEPOINT-based per-test isolation against a real PostgreSQL database, covering authentication, CRUD, and cross-user permission boundaries.
- Built a CI/CD pipeline (GitHub Actions) that lints and tests against an ephemeral Postgres instance, builds and Trivy-scans the container image — gated on fixable CRITICAL/HIGH findings only — and pushes to ECR under immutable SHA tags via OIDC-based AWS authentication, with an automated pull request bumping the deployed image tag.
- Deployed to the platform above via Kustomize overlays, including PreSync-hook jobs for Alembic migrations and idempotent first-superuser bootstrapping, plus Prometheus instrumentation and a ServiceMonitor for request-level observability.

AWS 3-Tier Infrastructure Automation

Terraform, VPC, EC2, ALB, Auto Scaling

Repo: [aws three tier architecture](#)

- Architected a highly available 3-tier network (Web/App/DB) on AWS with modular Terraform, strict security group isolation between tiers, and ALB/Auto Scaling for fault tolerance.