

# Masudur Rahman

Senior Software Engineer (DevOps) | Pathao Ltd, Fintech Engineering

✉ masudjuly02@gmail.com · 📞 +880 1723-531067 · 🌐 masudur-rahman · 🌐 masudur-rahman · 🌐 mrahman.xyz

## EXPERIENCE

### Pathao Ltd — Senior Software Engineer (DevOps)

Jan 2024 – Present

Fintech Engineering, Dhaka, Bangladesh

- Engineered and scaled backend infrastructure for a high-traffic fintech platform, ensuring high availability and reliability for **400K+ active users**.
- Deployed **Talos Linux** clusters and automated **Flatcar OS** lifecycles, building an immutable Kubernetes foundation.
- Set up **Apache Airflow** pipelines on Kubernetes to migrate high-volume on-premise financial data into **GCP BigQuery** for analytics.
- Built custom **Prometheus** exporters and **Grafana** dashboards to ensure high observability and proactive monitoring across DNS, GitLab, and Harbor.
- Resolved node over-utilization by introducing **K8s Descheduler** to automate workload rebalancing, improving overall cluster efficiency.
- Hardened stateful services and cloud infrastructure using host-level firewall rules, NFS-backed storage, and a **Bunkerweb** + **CrowdSec** WAF stack.
- Engineered secure, cross-site connectivity by implementing **Nginx Gateway** and **Squid proxy** for observable traffic routing.

### AppsCode Inc. — Lead Software Engineer

Jun 2023 – Dec 2023

Full-time, Dhaka, Bangladesh

- Lead the design and maintenance of **AppsCode API Server**, a RESTful API for managing Kubernetes clusters.
- Restructured the cluster import flow for **AppsCode Console**, improving user experience and performance.
- Implemented dynamic feature controller for managing features in imported clusters, such as monitoring, security.
- Restructured the **Licensing** system, automating license issuance, validation and enforcement.
- Packaged **AppsCode Console as a Service**, deployable through various DNS providers and Cloud Storage Services.

### AppsCode Inc. — Senior Software Engineer

Jan 2021 – Dec 2022

Full-time, Dhaka, Bangladesh

- Designed and Maintained **ByteBuilders API Server** (Go, macaron, Helm, K8s).
- Added support for importing **Kubernetes Cluster** [Managed, Public & Air Gapped] to ByteBuilders Dashboard.
- Implemented a **Background Task Manager** for long running tasks, log/exec for K8s pods/services and Invoice generation via NATS.
- Developed a **Prometheus Proxy Server** for Grafana datasource. Added CI/CD pipelines in Github Actions.
- Ran production deployments and day-to-day ops. Mentored junior engineers.

### AppsCode Inc. — Software Engineer

Nov 2018 – Dec 2020

Full-time, Dhaka, Bangladesh

- Added GCE support to **Pharmer** using Cluster API for K8s cluster provisioning.
- Integrated **Stripe** payment APIs — products, plans, payments, and invoices.
- Built a **K8s Controller** for provisioning Grafana Dashboards and Datasources.

## PROJECTS

**Expense Tracker Bot** [GitHub] — Telegram bot built with **Go** that parses **natural language** inputs to track personal finances. Features multi-account management, categorized budgeting summaries, and automated PDF reports.

**ByteBuilders by AppsCode** [Link] — Back-End server for a Kubernetes Dashboard. Built with **Go**, featuring Stripe payment API integration, NATS event-driven task manager, and K8s cluster import wizard.

**Grafana Operator** [GitHub] — K8s Controller for Managing Grafana Dashboards and Datasources. Added the initial version and E2E tests using Ginkgo.

**Pharmer** [GitHub] — K8s Cluster Manager using Kubeadm & Cluster API. Added GCE provisioning support.

**Logger** [GitHub] — nats-logr is a logr implementation using NATS. union-logr aggregates multiple loggers. Impacted Pharmer significantly.

**Pawsitively Purrfect** [GitHub] — Pet Adoption web app in Go, GraphQL. Service-Repository-Data pattern with gRPC-based data layer.

## TECHNICAL SKILLS

**Languages:** Go, C++, Bash

**Architecture:** RESTful APIs, Event-Driven (NATS), gRPC

**Cloud & Infra:** GCP, Kubernetes, Docker, Talos Linux, Flatcar

**Observability:** Prometheus, Grafana, Custom Exporters

**IaC & CI/CD:** Terraform, Ansible, Helm, GitHub Actions, ArgoCD

**Data:** PostgreSQL, NATS, BigQuery

**Security:** CrowdSec, Bunkerweb, iptables

## CERTIFICATION

**CKA: Certified Kubernetes**

**Administrator**

The Linux Foundation

Oct 2025 – Oct 2027

ID: LF-wtyegudkav

## EDUCATION

**BSc in Computer Science & Engineering**

Chittagong University of Engineering and Technology, Bangladesh  
2014 – 2018 | CGPA: 3.76/4

**Competitive Programming**

Solved **1400+** problems across online judges. Participated in ACM ICPC Dhaka Regional.

Codeforces: **1702**

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## OPEN-SOURCE

**cluster-api-provider-gcp**

Fixed node role and disk size provisioning issues for **GCP** clusters.

**go-gitea/gitea**

Refactored user avatar naming logic in the core **Go** backend.

**grafana-tools/sdk**

Refactored and implemented new **Go APIs** for Grafana integrations.

**nats-io/k8s**

Fixed WebSocket connection issues in the **NATS** Helm chart.