

As a dedicated Backend Engineer, I am passionate about building and optimizing large-scale distributed systems. My objective is to leverage my expertise in Kubernetes, microservices, and CI/CD pipelines to design, implement, and maintain robust backend solutions. Committed to designing and maintaining scalable, secure, and high-availability backend solutions for innovative projects.

Work Experience

Junior Backend Engineer

Poridhi.io

Dec 2023 - Present

DevOps Team

Dhaka, Bangladesh

- Developed and implemented comprehensive DevOps solutions for customer microservice applications, adhering to GitOps principles.
- Deployed all services on Kubernetes clusters, configured horizontal pod autoscaling, and managed cluster secrets from scratch on bare metal.
- Ensured robust CI/CD pipelines using on-premise solutions for continuous integration, maintaining security best practices.
- Utilized ArgoCD for continuous deployment, set up NGINX-Ingress for traffic management, and exposed services externally via Cloudflare Tunnel.

Engineering Team

- Built a Kubernetes playground leveraging Firecracker microVMs and software-defined networking.
- Designed and maintained high-availability systems through a distributed architecture using gRPC.
- Focused on backend engineering, implementing scalable and resilient backend solutions.
- Developed and maintained a Pub/Sub architecture with Redis queues.
- Implemented both software and database level state machine-based systems.

Technologies and Languages

- **Languages:** Go, Python, Bash, C++
- **Databases:** MySQL, PostgreSQL, MongoDB, Redis
- **Technologies:** OpenTelemetry, Kubernetes, Docker, Git, ArgoCD, NGINX, Prometheus, Grafana
- **Soft skills:** Teamwork, Communication, Problem Solving, Leadership
- **Other:** Data structures and algorithms, software-defined networking, distributed systems, microservices architecture, CI/CD pipelines, high availability systems, performance tuning, security best practices

Education

- **B.Sc. Computer Science and Engineering**, Jashore University of Science and Technology. **2019 – 2024**

Problem Solving

Codeforces and Leetcode Solved a total of 150+ problems.

Certifications and Courses

- Fundamental of Backend Engineering (**Udemy**, Instructor: **Hussain Nasser**)
- Fundamental of Network Engineering (**Udemy**, Instructor: **Hussain Nasser**)
- System Expert (**Algoexpert**)
- Lets Learn DevOps with Google Cloud (**Poridhi**)

Projects

- **Rate Limited Calculator** **Tools: Golang, echo 4, redis** [Github Link](#)
 - Implemented a rate limiter
 - Use sliding window algorithm
 - Redis for queue
 - Write unit test
- **Recipe API** **Tools: Django REST Framework, Postgresql, Docker, GitHub CI/CD, AWS** [Github Link](#)
 - Develop in a Test Driven Development (TDD) approach.
 - Build and handle Image uploading via API.
 - Implement throttling(rate limiting) features.
 - Write Dockerfile, docker-compose, and GitHub action scripts.
- **IMDB API Clone** **Tools: Django REST Framework, Postgresql, AWS** [Github Link](#)
 - Implement different types of views, permission, and filter.
 - Implement throttling(rate limiting) features.
- **Prothom Shop - Ecommerce** **Tools: Django, Postgresql, GitHub** [Github Link](#)
 - Handling product variation during add to cart.
 - JWT Authentication
- **Multi Vendor-Restaurants - Ecommerce** **Tools: Django, Postgresql, GitHub** [Github Link](#)
 - Handling product variation during add to cart.
 - Handling multiple user types.

Awards

- **NASA Space Apps Challenge 2022 (Top 35)**

Interests

- Passionate about exploring technology through literature, particularly system design and distributed systems books.
- Enjoy engaging in continuous learning and deepening my understanding of complex technical concepts.

Reference

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