Raihan Khan

Nationality: Bangladeshi   **Date of birth:** 15/06/1997

📞 **Phone number:** (+880) 01521331536   ✉ **Email address:** raihankhanraka@gmail.com

🔗 **LinkedIn:** https://github.com/raihankhan   🌐 **Website:** https://github.com/raihankhan

📍 **Home:** 1236 Dhaka (Bangladesh)

ABOUT ME

As a Golang Backend developer, I have developed and maintained Kubernetes controllers to provision databases on any private and public clouds. My responsibilities extended to designing and implementing CRD based features to simplify and automate routine database tasks. My experience also encompasses building monitoring stack with ELK, secured Docker images for applications, Bash scripts, Customised Grafana Dashboards, along with implementing effective CI/CD pipelines and release workflows.

WORK EXPERIENCE

Senior Software Engineer
Appscode Ltd. [01/08/2023 – Current]

City: Dhaka
Country: Bangladesh

- Design and implement Kubernetes controllers to provision databases on any private and public clouds
- Provide client support in migrating to product releases and troubleshooting
- Lead the team in implementing new features

Software Engineer
Appscode Ltd. [01/08/2021 – 31/07/2023]

City: Dhaka
Country: Bangladesh

- Develop and maintain Kubernetes controllers to provision databases on any private and public clouds
- Implement CRD based solutions to simplify and automate routine database tasks such as Monitoring, Upgrading, Scaling, Volume Expansion, Backup, Recovery, Failure detection, and Reconfiguration.

PROJECTS

KubeDB
[01/08/2021 – Current]

- **Designed and developed Kubernetes controllers from scratch** to provision and manage **Elasticsearch, Kibana, Apache Kafka, Rabbitmq, Opensearch Dashboards** along with required kubernetes resources.
- Enhanced database controllers capability by implementing **Kubernetes native features like TLS Reconfiguration, Vertical Scaling, Restart, Volume Expansion, Version Upgrade**, and **Horizontal Scaling** for day 2 lifecycle management.
- Improved database management flexibility by developing features including **Metrics reporter sidecar, Custom configuration, TLS secure communication, Customizable health checker with continuous read/write monitoring, Vault managed secret** etc.
- Provided monitoring support using **Prometheus and customized Grafana Dashboards** to ensure the stability and performance of database clusters on Kubernetes.
- Ensured products reliability by **removing CVE from database images, implementing automated testing pipelines Using GitHub actions CI for databases** and **ensuring default container/pod security configurations**.
- **Managed the team by planning, designing and guiding** in production ready controller development for new databases namely Solr, Druid, Singlestore, and tools like Kafka Connect.
- **Provided client support** in troubleshooting controller operations, database migration, upgrade etc.
- Contributed in reaching end users through **live webinars on latest features and technical blogs** .
- Achieved **335k+ downloads** for the main docker image and have subscribed clients who are reselling it to more than **1000+ end users**.

Link: https://kubedb.com/

Stash

[04/2023 – 05/2023]

- **Improved user experience by adding support for Pre-calculated storage size for Persistent Volume** to temporarily store database snapshot backups before uploading to remote cloud backend repository or restoring to database from it.

Link: https://stash.run/

DIGITAL SKILLS

Tools and Technologies

Kubernetes / Docker / ELK stack (Elasticsearch, Kibana, Logstash) / Grafana & Prometheus / Jenkins / Google Kubernetes Engine (GKE) / REST, gRPC / Helm chart / FluentD / Git-GitHub

Databases and Systems

RabbitMQ / Kafka / OpenSearch / MySQL & MongoDB

Languages

Backend development (Golang) / Python / Bash Scripts / C++

EDUCATION AND TRAINING

Bachelor of Science in Computer Science and Engineering
Comilla University [2016 – 2021]

City: Cumilla
Country: Bangladesh
Website: https://cou.ac.bd

PUBLICATIONS

Medication correlation analysis for outbreak prediction

[2023]

Bulletin of Electrical Engineering and Informatics (BEEI) · Jan 8, 2023

LANGUAGE SKILLS

Mother tongue(s): **Bangla**

Other language(s):

English

LISTENING C2 **READING** B2 **WRITING** B2

SPOKEN PRODUCTION C1 **SPOKEN INTERACTION** C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

ACHIEVEMENTS

Competitive Programming

Participated in 15 national level programming contests including **ICPC Dhaka Regional Contest 2019** (as CoU Dauntless) and **National Collegiate Programming Contest 2018 and 2020** (as CoU Mirror Squad)