ABDULLAH AL MARUF
SOFTWARE ENGINEER

LIFE PHILOSOPHY

"Do not fear failure but rather fear not trying"

- Roy T. Bennett

CONTACT

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- 🌐 https://maruftuhin.com
- 📍 Waco, TX, USA

EDUCATION

M.S. in Computer Science
Baylor University
Session 2020-Present

B.Sc. in Computer Science & Engineering
Chittagong University of Engineering & Technology
Session 2012-2017

TECHNICAL SKILLS

`GO` `C` `C++` `Java` `SQL`

`Kubernetes` `Docker` `AWS`

`GCP` `Azure` `PostgreSQL`

`MySQL` `MariaDB` `MongoDB`

`Git` `Bash` `gRPC` `Linux`

STRENGTHS

`Team Work` `Self Learning`
`Communication` `Optimist`
`Problem Solving`

PROFILE

Passionate software engineer with **4** years of working experience in both developing **Kubernetes** tools in **GO** and managing microservice based infrastructure in production. Acted as AppsCode's **KubeDB project head** for more than a year. Love to participate in **programming contests**. An enthusiastic **team player**.

EXPERIENCE

Graduate Research Assistant
📅 *Jan, 2021 - Present*
Baylor Cloudhubs Lab
📍 *Waco, TX, USA*
🔗 https://github.com/cloudhubs

- ➤ Performed telemetry log tracing analysis to reconstruct Microservices architecture.
- ➤ Performed static code analysis of java spring boot to detect JMS and Rest communication between Microservices.
- ➤ Technology Used: Java, Spring Boot, Docker, Docker Compose, Kubernetes

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Intern Researcher
📅 *Summer 2020*
Red Hat Research
📍 *Brno, CZ (Remote)*
🔗 https://research.redhat.com/

- ➤ Led a small team of undergraduate students to conduct research on technical debt.
- ➤ Analyzed version controlled codebase to find probable code debts.
- ➤ Performed literature mapping study on technical debt and code smells.
- ➤ Technology Used: Java, Spring Boot, Git.

DevOps Engineer
📅 *Feb, 2020 - Dec,2020*
Digital Healthcare Solutions
📍 *Dhaka, Bangladesh*
🔗 https://dh.health

Formerly known as Telenor Health. DH makes high quality health services and health financing accessible for all.

- ➤ Concentrated on migration of infrastructure to Kubernetes.
- ➤ Experienced hybrid cloud infrastructure consisting of aws and openstack private cloud.
- ➤ Exercised cloud native best practices for monitoring and alerting.
- ➤ Technology Used: AWS, Kubernetes, Ansible, Terraform, Docker, Docker Compose, Traefik, Nginx, HAProxy, Prometheus, etc.

PROUD OF

Competitive Programming
- Solved overall 900+ problems on different Online Judges.
- Divisional Champion of ACM ICPC Dhaka Regional 2014

Open Source Participation
User, Follower and Contributor of many open source projects.

KubeDB's growth
From very few to thousands of daily users.

Leadership
Served as President of CUET COMPUTER CLUB. Also acted as Project Head of KubeDB.

TOP OPEN SOURCE CONTRIBUTION

kubernetes/kubernetes
Production-Grade Container Orchestration.

kubedb
Database management tool for Kubernetes.

stash
Backup and restore plugin for Stash.

kmodules/client-go
Kubernetes client-go utilities

appscode/analytics
Essential analytics for OSS

Find me online

- linkedin.com/in/maruftuhin
- github.com/the-redback
- stackoverflow.com/u/4628962
- twitter.com/maruf2hin
- https://maruftuhin.com
- codeforces.com/profile/the_redback

EXPERIENCE

SOFTWARE ENGINEER
AppsCode Ltd.

May, 2017 - Jan, 2020
Dhaka, Bangladesh

Subsidiary company of AppsCode Inc. USA. An Integrated platform for collaborative coding, testing & deploying containerized apps.

➤ Worked to build **Kubernetes controller** tools to utilize Kubernetes services.
➤ Maintenance and development of **KubeDB** project, A database management tool for Kubernetes.
➤ **Led team members** to design and implement the core features of KubeDB.
➤ Contributed and worked with many **open source projects** including Kubernetes, Docker, Helm, Kops, Prometheus, gRPC, Restic, etc.
➤ Used: **Golang**, **Kubernetes**, **Docker**, **MongoDB**, **Elasticsearch**, **GCP**, **AWS**, **Azure**.

TOP PROJECTS

KubeDB
🔗 https://kubedb.com

A cloud-native database management solution for Kubernetes to simplify and automate provisioning, backup, recovery, failure detection for various popular databases.

➤ Led a small team to design & implement the core features.
➤ Designed and implemented various database support from scratch.
➤ Designed and implemented MongoDB clustering system support.
➤ Improved Postgresql and Elasticsearch clustering system.
➤ Worked with Prometheus exporters to export database metrics.

Stash
🔗 https://appscode.com/products/stash

A volume backup tool designed for Kubernetes. Under the hood, it uses Restic for backup/restore purposes.

➤ Improved database backup system using stash.
➤ Designed and implemented Elasticsearch and MongoDB cluster backup system from scratch.
➤ Integrated Stash support within Kubedb to backup/restore dbs.

Appscode/Analytics
🔗 https://github.com/appscodelabs/analytics

➤ Performed metrics collection about docker image pull
➤ Used web beacon strategy to perform metrics collection of Github page view.

INTERESTS

- Competitive Programming
- Gardening
- Photography
- Gaming
- Traveling