ABDULLAH AL MARUF

SOFTWARE ENGINEER

"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

























MvSOL











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 **Baylor Cloudhubs Lab**

📾 Jan. 2021 - Present

♥ 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.

Intern Researcher

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 **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 1100+ problems on different Online Judges.
- Divisional Champion of ACM ICPC Dhaka Regional '14 & '15
- Open Source Participation
 User, follower and contributor.

M KubeDB's growth

From very few to thousands of daily users.

iii 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

- in 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, 2020P 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