MD TAHSIN RAHMAN

Software Engineer

EXPERIENCE

Software Engineer

Sea Ltd

May 2021 - Present

♥ Singapore

Sea Labs, Cloud Engineering Team, Storage Sub-Team **Technology:** Golang, Kubernetes, Ceph, Rook, Openstack

- Design and development of object storage, blocks storage and file storage products for cloud platform, based on ceph
- Responsible design and maintenance of ceph clusters(across multiple data centres) and provide storage solution for our onpremise kubernetes clusters.
- Led product engineering with high level expectation set by respective product owner, done technical feasibility analysis, led architecture design to hands on development of actual backend components. In the process, collaborated with multiple teams to converge with same goal.
- Continuously improve the products in terms of stability, scalability, functionality and performance according to business requirement
- Responsible for reviewing technical designs and merge requests, mentoring new members.

Software Engineer/DevOps

AirAsia Bhd.

February 2020 - April 2021

♥ Kuala Lumpur, Malaysia

Technology: Kubernetes, Docker, GCP, Terraform, Golang, Istio

- Develop a central logging and monitoring platform, using prometheus, loki and grafana.
- Write tools using golang for automating toil
- Provision and manage infrastructure using terraform
- Create and maintain fully automated CI/CD pipelines for code deployment using Gitlab-CI
- Improving developer workflow, increasing scalability, and optimizing cost

Software Engineer

AppsCode Inc.

Mar-Aug 2018, Nov 2018 - Dec 2019

Ohaka, Bangladesh

Technology: Golang, Kubernetes, Docker

- Worked to build kubernetes controller tools and services
- Develop and maintain kubernetes cluster bootstrapping and management tool
- Design and build on a security tool for scanning vulnerabilities of a Linux host from scratch

PROJECTS

SealCloud 2

Worked on design and development of multiple storage related products for SEA's cloud platform, based on ceph

- A highly available(multi-regional) object storage service(similar to aws s3)
- A block device service for virtual machines (similar to aws elastic block storage)
- A shared filesystem service (similar to aws elastic file system), and integrate with other products(vm and container engine)

PROJECTS

Pharmer 2

Open-source, kubernetes cluster bootstrapping and management tool using Kubeadm and Cluster-API. Supports GCP, AWS, Azure, DigitalOcean, Linode and Packet

- Implemented cluster infrastructure management, autoscaling, and automatic repair support by integrating with cluster-API
- Wrote kubernetes controllers for managing different cloud providers resources.
- Implemented support for creating highly available multi-master kubernetes clusters
- Refactored legacy codebase to improve support for adding new cloud providers

OPEN-SOURCE CONTRIBUTIONS

Kubernetes

- Cluster-API a kubernetes sub-project providing declarative APIs and tooling to simplify provisioning, upgrading, and operating multiple kubernetes clusters. Contributed to the core project and implementation for AWS, GCP and Azure platforms.
- Collaborated on structured logging initiative, mi grating unstructured logs to structured format
- Member of kubernetes-sigs github organization

TECHNICAL SKILLS



EDUCATION

B.Sc. in Computer Science and Engineering Chittagong University of Engineering and Technology

March 2014 - Nov. 2018

EXTRA CURRICULAR ACTIVITIES

- 2nd, National Collegiate Programming Contest, 2017 (150 teams)
- 3rd, SUST Inter University Programming Contest, 2017 (160 teams)
- 10th, ACM ICPC Regional Dhaka Site, 2016 (120 teams)

INTERESTS

- Cloud computing and distributed systems
- Site Reliability Engineering