

Harshita Sharma

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SUMMARY

Software Engineer and Open Source Enthusiast with experience in Distributed Systems, DevOps, Cloud Native solutions - Cloud Platforms, Kubernetes, Docker, and Storage - OpenEBS, writing solutions in Golang and Python.

Deployed and managed Cloud Native Applications on GKE using Dynamically Provisioned Container Attached Storage, integrated and tested on Gitlab pipelines using Chaos Engineering Tools written in Ansible, Python, Golang and ran as Kubernetes Jobs and Monitored using Prometheus.

Using Automation on every stage of Product Lifecycle and provisioning - PAAS services, GKE clusters, Data Migration.

Open Source Event Speaker at FOSDEM Brussels, CNCF meetups, and Cloud Native Rejekts on topics like Local PV, VMware Velero Backup/Restore, Data Migration, ZFS.

Skilled in Python, Kubernetes, Golang, Ansible, GitHub, Linux.

EXPERIENCE

Mayadata, Bengaluru - *Software Engineer*

Mar 2019 - May 2020

- Continuous Integration workflow
 - Created Gitlab CI/CD pipeline for testing REST API's product. It resulted in keeping the Production branch clean.
 - CI/CD stages included:
 - Deploy GKE cluster, setup environment, and health checks of the cluster.
 - Deploy products on the cluster.
 - Health checks of the cluster including availability and accessibility
 - Functionality checks: Kubernetes Jobs for API testing written in Python scripts and provisioned by Ansible on the GKE cluster.
 - Cleanup cluster
- Chaos Engineering
 - Created Gitlab Pipeline for Chaos Engineering E2E tests of product OpenEBS CStor Volumes
 - Deployed OpenEBS Control and Data Plane components with CStor (Containerized Attached Storage Pool)
 - Tests included:
 - App-Based: Deploying of Stateful and Stateless workloads (like Busybox, Prometheus, Minio, Percona, etc.) Liveness, Load Generation on the apps
 - Cluster-Based:
 - Fault Tolerance i.e., Pod, Container, Node, Disk Failures, etc.
 - Availability of volumes (Replication Factor)

- Worked on Data Migration As A Service using OpenEBS Velero Plugin stored on AWS S3 Buckets, Google Cloud, Minio, etc.
- Worked on Dynamic Provisioning of Kubernetes Local PV
 - Talk selected on Cloud Native Rejects “Building Blocks: Dynamic provisioning of Kubernetes Local PV”

Celebal Technologies, Jaipur - *Associate Data Engineer*

Sept 2017 - Sept 2018

- Worked on a full-stack Big Data ETL and reporting project for a leading media networks client on Azure Cloud including a variety of technologies i.e., Azure Data Factory and SSIS as ETL platform, Azure Blob Storage as the storage platform, Azure HDInsight, and Azure SQL Data Warehouse as Data processing/transforming platform and finally Power BI as the reporting tool.
- Worked in a Big Data Orchestration project for a leading automotive corporation client involving Azure Data factory as ETL tool, Azure Data Lake Store as a storage platform, and Azure Data Lake Analytics as a processing platform through U-SQL.

PERSONAL PROJECTS

Image Controller Kubernetes Controller (Golang)

The Image Clone Controller watches for Deployments/DaemonSets and caches the images by re-uploading to provided registry and reconfiguring the applications to use these copies.

Project link: [image-controller](#)

Fair Billing (Golang)

Fair Billing is a command-line application that takes a log file as input and prints report of the users, the number of sessions, and the minimum possible total duration of their sessions in seconds.

Project link: [fair-billing](#)

TALKS

- [Preserve Kubernetes state using velero](#)
- [Run ZFS in userspace](#)
- Cloud Native Rejects “Building Blocks: Dynamic provisioning of Kubernetes Local PV”
- [Migrating stateful apps running on Kubernetes](#)

SKILLS

- Container Technologies: Kubernetes, Docker
- DevOps tool: Gitlab
- Programming: Golang
- Scripting and Automation: Python, Bash, Ansible
- Cloud Providers: GCP, Azure
- Others: Github, Linux Internals, Microservices, Velero

Education

2014 - 2018

Jaipur Engineering College & Research Center, Jaipur - *B.Tech, Computer Science*

Contact Details

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