ANKUR H. SINGH

Mumbai - 400067, Maharashtra, India.

<u>LinkedIn</u> | <u>GitHub</u>

Profile

As a seasoned engineer with **over five years** of professional experience, I've cultivated expertise in **DevOps**, **SRE**, **Mobile App Development** while embracing a **knowledge-sharing mindset** through **mentoring** & **teaching**. As an advocate of the **SRE** philosophy, I focus on building **reliable** and **resilient systems**, ensuring **optimal performance** and **high availability**. I bring this mindset to every project, emphasizing **proactive monitoring**, **fault tolerance** & **effective incident response**. In the realm of **DevOps**, I specialize in bridging the gap between **development** & **operations**, streamlining software **delivery pipelines** and fostering a **culture** of **collaboration**. With **hands-on** experience with cutting-edge tools and technologies, I enable **automation**, **continuous integration** & **deployment**. I am passionate about **empowering** the next generation of **tech professionals** by **guiding aspiring engineers**, sharing my experiences and helping them grow.

Work Experience

Site Reliability Engineer Red Hat, Inc.

Oct 2022-Present

- Working for development, maintenance & support for Red Hat OpenShift managed service on Azure Cloud.
- Provided insights on ARO cluster installation success rates globally by enhancing code for emitting required cluster metrics.
- Initiated evaluation of **cost-optimization** opportunities by creating **scripts** to identify top under-utilised clusters and **recommending** appropriate **right-sizing** actions.
- Promoted use of **spot instances** in clusters with non-critical or stateless workloads through **blogs** & **technical sessions**, contributing to overall cloud cost reduction.
- Contributed to Security Compliance Verification & Rectification initiative for Azure Red Hat Openshift Resource Provider in response to attack on Microsoft by Midnight Blizzard.
- Created monitors to gauge cluster health & detect anomalies, enabling proactive alerting for instability in customer clusters & internal services.
- Participating in regular on-call rotation shifts for incident response ensuring maintained SLAs.

DevOps SDE - II

HERE Solutions

April 2022-Sep 2022

- Maintaining dev & production kubernetes clusters with rolling upgrades, bug fixes and feature releases.
- Responding to failures of build & deployment pipelines and further enhancing them for smooth shipping of deliverables.

Senior DevOps Engineer

Zycus Infotech Pvt. Ltd

July 2019-March 2022

- Designed CICD pipelines, to ensure seamless deployments, tailored specific for each product.
- Maintained & reviewed production configurations for 40+ multi-tenant web applications.
- Implemented automations to integrate devops tool stack for end-to-end & hands-free processes.
- Handled frequent stable releases of around 90+ products on staging & production environments.
- Ensured maximum uptime of products to **meet SLAs** by responding to **production incidents.**

Education

BACHELORS OF ENGINEERING - University of MumbaiInformation Technology

June 2015 - June 2019

CGPA: **8.20**

Technical Skills

- Languages: Python, GoLang, JAVA, Groovy, Bash
- Tools: Ansible, GoCD, Jenkins, Jira, Git, Kubernetes, Linux, Docker, Terraform, Gitlab, Nexus, Flyway, Consul, Prometheus, OpenShift
- Knowledge: CICD, AWS, Azure, Observability

Achievements and Certifications

- Certified Kubernetes Administrator (CKA) certification Dec 2023
- GitLab Certified Associate certification April 2021
- Facilitator/Guest lecturer for technical seminars & workshops at Engineering Universities (since 2019)
- Won 3 hackathons at national level Smart India Hackathon as Industrial Mentor

Projects

• Zero Downtime CICD Implementation

- Led, designed and implemented **workflow** to ensure **upgrades** of products **without downtime** and minimal manual intervention.
- Reduced manual efforts and CICD timeframe by 75% with quicker dev-to-production workflows.

• OpenShift Cluster Resource Optimization

- Initiated one-time effort for finding underutilised internal legacy OpenShift clusters & analyzing their resource utilization to recommend suggestions to optimize it as a cost saving action.
- Further, impacts included deprovisioning, scaling down or implementing auto-scaling, instance right sizing & migration to HCP of identified underutilised clusters saving unused compute resources & cost.
- Moreover, provided a web portal to analyse & provide suggestions for optimised resource utilization for internal OpenShift clusters based on earlier findings.

• Metrics Collection & Monitoring Implementation

- Implemented **metrics collection** and exportation using OpenTelemetry for services used for authentication, provisioning and maintenance of ARO clusters.
- Increased observability to internal services, thus, further increasing their reliability & overall
 availability by 90% with creating monitors for alerting on degradation of performance or
 response of the services.