

ANKUR H. SINGH

Mumbai - 400067, Maharashtra, India.

 [LinkedIn](#) |  [GitHub](#)

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

Senior Site Reliability Engineer

Red Hat, Inc.

Oct 2022-Present

- Working as **Functional Lead** in **APAC** region for **development, maintenance & incident resolution** for **Red Hat OpenShift** managed service on **Microsoft Azure Cloud** with **2500+ OpenShift clusters**, many containing **100+ nodes**.
- Handled major releases by crafting & implementing **automated CICD** workflows.
- Provided insights on **ARO cluster installation success rates** globally by enhancing code for emitting required cluster **metrics** and use it for creating **dashboards**, aiding to achieve **failure reduction by 15%**.
- Initiated evaluation of **cost-optimization** opportunities by creating **scripts** to identify top under-utilised clusters and **recommending** appropriate **right-sizing** actions, saving **\$150k/month** in first iteration.
- 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 resulting in **decreased response time** for incidents by **20%**.
- 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.
- Ensuring security & codebase health check with up-to-date module versions and associated dependencies in production repositories.
- **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 Mumbai
Information Technology
CGPA: **8.20**

June 2015 - June 2019

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 using **automation scripts**.
 - **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.
- **MISE Authentication**
 - Introduced **secure authentication mechanism** for ARO resource provider involving **MISE** which used **PoP** authentication schema in place of certificates for all incoming requests from ARM of our managed service.
 - Ensured compliance with Microsoft Security Standards and further enhanced the security by validating incoming requests strictly on ARO specific parameters.