Akshat Sinha

DEVOPS ENGINEER

akshatsinha720@gmail.com | +91 9334663435 | Gurugram, India | akshatsinha.dev | blogs.akshatsinha.dev

linkedin.com/in/sinhaakshat | github.com/akshatsinha007 | github.com/shrivastava-afk

Technical Skills

Cloud: AWS (EC2, ECR, EKS, RDS, ELB/ALB, S3, VPC, IAM, Route 53, Transit Gateway, API Gateway, Athena), GCP (GKE, Cloud Storage, Artifact Registry), Azure (AKS, ACR)

Orchestration: Kubernetes, Docker, Helm, KEDA, Argo Rollouts

CI/CD: GitHub Actions, Devtron, Argo CD, Flux CD, GitOps Workflows

IaC & Scripting: Terraform, Crossplane, Karpenter, Python, Bash

Monitoring: Grafana, Prometheus, Coralogix, Pyroscope (eBPF), OpenTelemetry, VictoriaMetrics

Security: Trivy, SonarQube, SSO, SOC-2, PostgreSQL RBAC, Air-gapped/Bastion Architectures

Networking & Streaming: Cloudflare, Kafka

AI/LLM Infra: Ollama, LiteLLM, OpenRouter, GPU-based Model Hosting, AI Agents, AWS DevOps Agent

Experience

BharatPe — *Sep 2026 – Present*

SDE-II DevOps — *Gurugram, Haryana*

- Cut **502/504 errors during pod rotations** on BharatPe's most critical service (180s ALB drain vs 17.5s pod lifetime) via preStop hooks, ALB tuning and Spring graceful shutdown; QA chaos tests (Hey, Coralogix APM) took errors from **2.4% to <0.01%**, and the Argo Rollouts canary release to production runs with near-zero errors. Now the benchmark for rollout across **350+ production services**.
- Built a read-only **production-readiness validator** for Kubernetes clusters (**11 rules**, including multi-arch image checks) with a filterable app/env HTML dashboard; scanned **300+ microservices** against the rules.
- Migrated **120+ Ubuntu/Windows servers** and **50+ Kubernetes clusters** across **50+ AWS accounts** to a new endpoint security platform in **2 days with zero downtime**, using an automated install-then-decommission rollout.

Devtron — *May 2024 – Sep 2026*

DevOps Engineer-I — *Gurugram, Haryana*

- Managed **100+** multi-cloud Kubernetes clusters (AWS EKS, GCP GKE, Azure AKS) across **20-50 enterprise customers** including Indian unicorns and fintechs, maintaining **99.95% uptime SLA**.
- Owned end-to-end release engineering for Devtron OSS (**20K+ downloads**) and Enterprise Helm charts; maintained **15+ production charts** including PostgreSQL/Argo CD backups and **10+ microservice charts**, reducing release cycles from **4 days to 1 day**.
- Orchestrated zero-downtime migration of **20+ production Kubernetes clusters (200+ nodes)** from AKS to GKE and led **7 enterprise client migrations** from EC2 to EKS (10-12 services each) within **1-week timeframes**; built automated provisioning for **air-gapped**/private environments (**SSH tunneling**, bastion hosts) and onboarding docs, cutting manual setup time by **70%** and client onboarding by **50%**.
- Improved resource efficiency by **25%** through KEDA-based autoscaling and OpenCost analysis while maintaining performance SLOs.
- Designed canary deployment pipelines using Argo Rollouts with progressive traffic shifts (**25%→50%→75%→100%**) and automated rollbacks on error thresholds for **10+ microservices**.
- Implemented eBPF-based continuous profiling (Pyroscope + Grafana) to find microservice bottlenecks without code instrumentation.
- Drove incident response for **50-60+ monthly production escalations** across 100+ clusters, maintaining **95% first-response resolution rate** and **30min MTTR**. Conducted blameless postmortems and implemented preventive automation, reducing recurring incidents by **40%**.
- Implemented PostgreSQL RBAC with least-privilege controls and security audits, achieving **SOC-2 compliance** and reducing vulnerabilities by **40%** across all managed environments.
- Deployed a **12B-parameter model** on GCP GPU instances via Ollama with a custom Streamlit interface to auto-generate Python automation scripts and test cases (adopted by teammates, merged via standard PR workflow). Authored HLD/LLD and a **GenAI/LiteLLM-based** prototype for *Triage*, a Kubernetes debugging agent with scoped read-only RBAC that summarizes incidents and surfaces remediation steps for human approval; engineering built the production microservice from this design.

Devtron — *Jan 2024 – May 2024*

DevOps Engineer Intern — *Gurugram, Haryana*

- Managed multi-cloud Kubernetes clusters and participated in **30+ production incident responses**; contributed to Helm chart maintenance, release automation and GitOps workflow improvements supporting the move to fully automated pipelines.

Projects

Kubernetes Authentication Guard | View Repo — *Operator SDK, Kubernetes API*

- Designed a Kubernetes operator to implement basic authentication by monitoring Deployments/StatefulSets/Argo Rollouts for annotations and mutating them with Nginx sidecar containers for access control.

PostgreSQL Migration Automation | View Repo — *Kubernetes, PostgreSQL, Bash*

- Designed an automated, checkpointed PostgreSQL migration (Bitnami 11 → Official 14) using Kubernetes Jobs with backup verification and staged error recovery, enabling seamless upgrades for **20K+ OSS users** while preserving **data integrity**.

Education

Trident Academy of Technology — *2020 – 2024*

Bachelor of Technology in Computer Science and Engineering — *Bhubaneswar, Odisha*