





# AKASH PAWAR

 [akash202k](#)  [akashpawar.com](#)  [+91-9346706296](#)  [akashpawar202k@gmail.com](#)

## Summary

---

Cloud and Site Reliability Engineer with over two years of experience in designing scalable serverless architectures, optimizing backend systems, and automating kubernetes infrastructure. Skilled in developing cloud applications for performance, cost, and scalability.

## Certifications

---

- [Certified Kubernetes Administrator](#) — [AWS Solutions Architect](#) — [AWS Certified Developer](#)

## Experience

---

### DevOps Engineer

*Trames Private Limited*

**Dec 2022 – Current**

*India, Remote*

### Kubernetes & DevOps Infrastructure ([POC Click here](#))

- Architected and deployed a production-ready **EKS cluster on AWS** using **Terraform**, implementing multi-node groups (on-demand & spot instances), ALB controller, EBS CSI driver, and IRSA for secure workload identity management.
- Integrated **Karpenter** in AWS EKS for dynamic and cost-efficient node auto-scaling based on real-time **POD** resource Demand.
- Built end-to-end **GitOps CI/CD pipeline** using **ArgoCD** with app-of-apps pattern for managing micro-services deployment, external secrets integration via **ESO**, and automated application lifecycle management.
- Built a comprehensive **observability stack** using **Prometheus**, **Grafana**, **OpenSearch**, and **Fluent Bit**, enabling infrastructure metrics collection and centralized logging with custom **Grafana** and **OpenSearch Dashboards** for Kubernetes workloads.
- Designed **network security** with Kubernetes Network Policies, service mesh communication patterns, and **AWS ALB ingress** with SSL termination for secure multi-application routing.
- Hands-on experience with **AWS CloudWatch** for log aggregation, metrics, and alarms; later adopted **Logz.io** as well for advanced log analytics and centralized monitoring.

### Cloud Migration & Cost Optimization

- Led major **cloud migration** projects, migrating workloads from **AWS to Azure**, optimizing performance & reducing infrastructure complexity.
- Implemented **cost optimization strategies** using **Spot Instances**, **autoscaling**, **reserved instances**, and **resource right-sizing**, achieving a **35% cost reduction ( \$5,500/month)** without compromising scalability or reliability.
- Implemented cost-saving **automation workflows** using **Lambda**, **EventBridge**, and **API Gateway** for on-demand VM management, DynamoDB scaling & Slack-integrated VM control, optimizing resource usage & operational efficiency.
- Migrated production databases from aws to **Azure PostgreSQL Servers**, ensuring high availability, data integrity, and seamless data replication.

### Serverless & Automation

- Designed and deployed serverless backends using **AWS API Gateway**, **Lambda**, **S3**, **SQS**, & **SAM**, including event-driven patterns for efficient processing.
- Automated infrastructure provisioning with **Terraform** and **AWS CDK** for reliable, consistent deployments.
- Built a custom monitoring tool using Python for VM metrics and process tracking, deploying it via Ansible, improving observability and operational efficiency.

### CI/CD & Deployment

- Configured **GitHub Actions**, **AWS CodePipeline**, and **Azure DevOps** to streamline deployments, reducing deploy time and minimizing potential human errors.
- Implemented **self-hosted GitHub Actions runners** for deploying to private VMs in Azure, optimizing deployment & security of application workflow.
- Utilized **NGINX as a reverse proxy** for application traffic management, optimizing request routing and enhancing its performance.

## MCP – Cloud Cost Analysis With LLM

- Designed and built the **MCP Server and backend** using Python and **boto3**, enabling AWS cloud cost analysis through a seamless LLM-based query interface.
- Integrated AWS Cost Explorer APIs to fetch and summarize cloud spend, empowering users to detect high-cost services, idle resources, and spending trends.

## Networking, Security & Compliance

- Enforced **IAM policies, RBAC, IRSA & AWS Identity Center (SSO)** to standardize access control across AWS and Azure, enhancing security and streamlining user management.
- Implemented **AWS GuardDuty** for proactive threat detection and configured **OpenVPN, VPC/VNet Peering** to enable secure access to private and cross-cloud resources.
- Worked extensively with core services across both clouds: **EC2, EKS, IAM, S3, Lambda** on AWS and **Azure VM, AKS, App Service** on Azure.

## Skills and Expertise

---

- **Cloud Platforms:** AWS, Azure, Kubernetes (EKS, AKS), Docker, Helm, OpenVPN, VPC/VNet, Security Groups, NACLs
- **Infrastructure as Code:** Terraform, AWS CDK
- **CI/CD GitOps:** GitHub Actions, AWS CodePipeline, Azure DevOps, ArgoCD, Azure Pipeline
- **Programming Scripting:** Python, Node.js, TypeScript
- **Monitoring Observability:** CloudWatch, Logzio, Prometheus, Grafana, OpenSearch
- **Databases Messaging:** PostgreSQL, MongoDB
- **Networking Security:** VPN, Load Balancers (ALB, NLB), IAM, IRSA, RBAC

## Education

---

**MITAOE**

*B.Tech in ENTC with specialization in cloud computing*

**2019 – 2023**

*Pune, India*