MANISH KUMAR MITTAL

AWS & AZURE DEVOPS ENGINEER

CONTACT

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SKILLS

- **Cloud Platforms: - AWS** (EC2, S3, VPC, IAM, RDS, ElastiCache, CloudWatch, CodePipeline, API Gateway, Kafka, Lex), **Azure** (Web Apps, Function Apps, AKS, DevOps, Monitor)
- **CI/CD & Automation:** - Jenkins, GitHub Actions, GitLab CI/CD, Azure DevOps, AWS CodePipeline
- **Version Control: -** Git, GitHub, GitLab, Bitbucket
- **Infrastructure as Code (IaC): -** Terraform, CloudFormation, AWS CDK, ARM, Ansible
- **Containers & Orchestration:** - Docker, Docker Compose, Kubernetes (EKS, AKS, self-managed), Helm, Argo CD (GitOps)
- **Monitoring & Logging:** - CloudWatch, CloudTrail, ELK/EFK, Prometheus, Grafana
- **Scripting & Programming: -** Bash, Shell, Python, PowerShell, YAML.
- **Security & Compliance: -** IAM & RBAC, SSL/TLS, WAF, KMS, Azure Key Vault, HashiCorp Vault
- **Networking & Infrastructure: -** TCP/IP, DNS, HTTP/HTTPS, VPN, NAT, Transit Gateway
- **DevSecOps:** SAST, DAST, SCA, IaC Security Scanning, Vault, Secrets Management, RBAC, IAM Policies
- Databases & Caching: MySQL, PostgreSQL, MongoDB
- **Other Skills:** Cost Optimization, Performance Tuning, Automation, Troubleshooting, Incident Management, Knowledge Sharing

PROFILE

- **DevOps Engineer with 4+ years of experience** in designing, automating, and optimizing scalable cloud infrastructure across **Azure and AWS.**
- Strong expertise in **cloud architecture on AWS and Azure**, supporting production-grade, enterprise workloads.
- Proficient in **Infrastructure as Code (IaC)** using **Terraform, ARM Templates,** and **CloudFormation** to ensure standardized and repeatable deployments.
- Extensive experience building and maintaining **CI/CD pipelines** with **Azure DevOps, Jenkins, GitHub Actions.**
- Experience implementing **GitOps workflows** using **Argo CD** for Kubernetes-based deployments.
- Hands-on experience with **containerization and orchestration** using **Docker and Kubernetes (EKS, AKS)** for scalable application deployments.
- Proven ability to design and implement **high-availability architectures**, leveraging **blue/green, canary, rolling deployments,** zonal redundancy, and automated rollback.
- Strong background in **cloud security and governance** across AWS and Azure, including **IAM/RBAC, policy-as-code, secrets management, and gated approvals.**
- Strong background in **cloud networking**, including V**PC/VNet design, subnets, routing, load balancers, and private connectivity.**
- Demonstrated success in **cost optimization and resource governance**, reducing cloud spend while maintaining SLA and performance targets.
- Skilled in **event-driven and serverless automation** using **AWS Lambda**, **EventBridge, Azure Functions, and Logic Apps.**
- Solid experience in **monitoring, logging, and observability** using **CloudWatch, Azure Monitor, Prometheus, Grafana, and ELK stack.**
- Experience integrating **code quality and security scanning** using **SonarQube and vulnerability assessment tools.**
- Strong experience with **artifact and container registries** such as **Nexus, Artifactory, Harbor, ECR, and ACR.**
- Data-driven practitioner applying **DORA metrics** to optimize deployment frequency, lead time, change failure rate, and MTTR.
- Strong collaborator and mentor, enabling **DevOps culture, continuous improvement, and business-aligned cloud outcomes across teams.**
- Proficient in **scripting and automation** with **Bash, Python, Shell, and PowerShell** to streamline operations.
- Effective mentor and documentation advocate, ensuring **knowledge sharing**, **standardization, and continuous improvement.**
- Strong collaboration with **development, QA, security, and operations teams** to deliver business-aligned outcomes.
- Familiar with **SRE principles,** including error budgets, SLIs, and SLO-driven operations.

EDUCATION

Master of Computer Application 2022 - 2024
Galgotias University

Bachelor of Computer Application 2019 - 2022
Rajasthan University

WORK EXPERIENCE

DevOps Enginner

December 2021 - Present

Legalex Services LLP - Delhi, India

- Designed and automated **multi-cloud infrastructure on AWS and Azure**, delivering scalable, secure, and cost-optimized solutions.
- Built, maintained, and optimized **CI/CD pipelines** using **Azure DevOps, Jenkins, and GitHub Actions,** improving deployment speed and release stability.
- Implemented **Infrastructure as Code** with **Terraform, ARM Templates, and CloudFormation,** ensuring consistency across development, staging, and production environments.
- Developed reusable **Terraform modules** aligned with industry best practices for multi-account and multi-environment deployments.
- Containerized applications using **Docker** and orchestrated workloads on **Kubernetes (EKS/AKS, Fargate)** to enhance scalability and reliability.
- Delivered **high-availability and zero-downtime deployments** through **blue/green, canary, and rolling deployment strategies** with automated rollback.
- Automated provisioning of AWS services including **VPC, subnets, IAM, ECS/EKS, RDS, S3, and Route 53** to accelerate environment setup.
- Integrated **GitOps workflows** with **Argo CD,** enabling version-controlled and auditable Kubernetes deployments.
- Implemented **centralized monitoring and logging** using **CloudWatch, Azure Monitor, Prometheus, Grafana**, **and ELK/EFK**, reducing MTTR and improving observability.
- Designed **multi-region and fault-tolerant architectures** leveraging **ALB/NLB, Auto Scaling Groups, and DNS failover strategies.**
- Led cloud cost **optimization initiatives**, implementing S**avings Plans, Reserved Instances, rightsizing, and automated scheduling** to reduce cloud spend while meeting SLA targets.
- Collaborated with development teams to **modernize and migrate legacy applications** to containerized and cloud-native platforms.

PROJECTS

Project 1: Multi-Cloud GitOps Platform Migration (AWS + Azure)

Role: DevOps Engineer

Tech Stack:

- AWS (EKS, ALB, IAM, ECR), Azure (AKS, ACR, AAD), Terraform, Helm, Argo CD, Jenkins, Docker, Ansible, Prometheus, Grafana, EFK, HashiCorp Vault

Description:

Designed and developed **cloud landing zones** using **Terraform,** which included **networking baselines**, **IAM/AAD integration, and cluster security controls**. Adopted the **GitOps methodology** with **Argo CD,** enabling continuous reconciliation of infrastructure and application manifests, minimizing **configuration drift** and ensuring **declarative operations**. Implemented **multi-stage Docker builds** for efficient and secure **containerization of applications**, improving efficiency by **20% on image size reductions.** Established a **standardized CI/CD process** using J**enkins pipelines with shared libraries,** integrating **SonarQube (code quality), Trivy (image security scans)**, and artifact signing for compliance.

Roles & Responsibilities:

- **Authored reusable Terraform modules** for **network, compute, and identity management,** ensuring DRY principles and easier scaling.
- **Standardized Helm charts** across teams, creating a **service catalog** for stateless and stateful workloads.
- Designed **end-to-end CI/CD systems** in Jenkins, enabling faster **build-test-deploy** cycles with quality gates.

- **Integrated policy-as-code mechanisms** with **OPA** and **Gatekeeper**, preventing noncompliant Kubernetes resource deployments.
- Configured **ingress traffic routing, TLS, certificate management, and WAF protections** with **Nginx Ingress.**
- Built detailed **operational runbooks** and **real-time dashboards** to provide observability KPIs and alert-driven remediation.
- Maintained **cross-functional collaboration** with security, product, and infrastructure teams for compliance and scalable rollouts.
- Facilitated **disaster recovery tests** and **chaos engineering drills** to verify fault tolerance.

Impact / Achievements:

- Boosted **deployment frequency** from weekly to **20–30 per service per week**.
- Reduced **change lead time** from **2–3 days** to **<2 hours.**
- Improved **MTTR (Mean Time to Recovery)** by **45%** using proactive SLO monitoring and automated rollbacks.
- Achieved **99.95% application uptime**, meeting enterprise SLA standards.
- Lowered **security vulnerabilities** in containers by **70%** within the first 3 months of CI enforcement.

Project 2: Financial Analytics Cloud Platform

Role: DevOps Engineer

Tech Stack:

- AWS (EC2, S3, RDS, VPC, IAM, CloudWatch, ELB, Auto Scaling, Route 53),Terraform, Docker, Kubernetes (EKS), Jenkins, Helm, Ansible, Prometheus, Grafana, CI/CD

Description:

Developed a **scalable, secure, and automated cloud-based financial analytics platform** to handlereal-time financial data processing. Implemented **end-to-end CI/CD pipelines** using Jenkins and GitHub Actions to automate builds, testing, and deployments. Containerized microservices with **Docker and orchestrated** them on **Kubernetes (EKS)** clusters for high availability and scalability. Provisioned AWS infrastructure using **Terraform** and automated server configuration with **Ansible**. Configured **Prometheus and Grafana dashboards** for monitoring system performance, resource utilization, and alerts. Enforced **security best practices with IAM policies**, Kubernetes secrets, andautomated vulnerability scanning.

Roles & Responsibilities:

- Designed and provisioned AWS infrastructure using **Terraform**, including EC2, RDS, S3, VPCs, security groups, load balancers, and Auto Scaling groups.
- Built and maintained **CI/CD pipelines in Jenkins** for automated build, testing, and deployment of applications.
- Containerized microservices using **Docker** and deployed them on **Kubernetes (EKS) clusters.**
- Created **Helm charts** to manage environment-specific Kubernetes deployments efficiently.
- Automated Linux server provisioning, patching, and configuration management using **Ansible**.
- Implemented **Prometheus and Grafana** dashboards for real-time monitoring of system performance, application metrics, and infrastructure health.
- Managed secrets and access control using **AWS IAM and Kubernetes Secrets.**
- Configured **CloudWatch alarms and SNS notifications** for proactive incident management.

Impact / Achievements:

- Reduced deployment and provisioning time by **80%** through automation.
- Achieved highly available and **fault-tolerant infrastructure,** minimizing system downtime.
- Strengthened security and compliance by integrating **IAM policies, secrets management,** and monitoring.
- Enabled real-time performance insights and proactive issue resolution with **monitoring dashboards.**
- **Increased platform scalability** by tuning Kubernetes HPA and cluster autoscaling to handle peak financial data loads without performance degradation.
- **Improved team productivity** by automating manual operational tasks and providing self-service deployment workflows.

Project 3: SmartRetail Cloud Modernization Platform

Role: DevOps Engineer
Tech Stack:

- Azure (Virtual Machines, Azure Blob Storage, Azure Functions, Azure API Management, Azure SQL Database, Azure Cosmos DB, Azure Front Door / Azure CDN, Azure DNS, Virtual Network, NSG, Azure Monitor, Log Analytics),
- Terraform, Azure DevOps Pipelines, Jenkins, Docker, Kubernetes (AKS), Ansible, Git, Prometheus, Grafana

Description:

Implemented a cloud-native retail platform on **Microsoft Azure** to support real-time inventory tracking, secure online transactions, and highly available services. Migrated legacy infrastructure to Azure using **Terraform** and automated deployments through **Azure DevOps and Jenkins pipelines.** Containerized applications using **Docker** and deployed them on **Azure Kubernetes Service (AKS)** for scalability and resilience. Integrated **Azure Functions and API Management** for order and payment workflows. Established centralized monitoring using **Azure Monitor, Prometheus, and Grafana** to ensure platform reliability and performance.

Roles & Responsibilities:

- Migrated legacy on-premise infrastructure to **Azure Cloud** using **Terraform (IaC)**.
- Designed secure **Azure VNet architecture** with subnets, NSGs, route tables, NAT Gateway, and multi-tier networking.
- Built and maintained **CI/CD pipelines** using Azure DevOps and Jenkins for automated build, test, and deployment.
- Containerized applications using **Docker** and deployed them on **AKS**.
- Implemented **serverless components** using Azure Functions and API Management for payment and order processing.
- Managed data using **Azure Cosmos DB** for real-time inventory and **Azure SQL Database** for transactional workloads.
- Configured **Azure Monitor alerts and Action Groups** for proactive incident response.

Impact / Achievements:

- Minimized manual operational effort by **80%** through CI/CD and automated configuration management.
- Scaled platform to handle **5× traffic spikes** during peak retail seasons.
- Enabled real-time observability and proactive issue resolution using **Grafana dashboards and Azure Monitor alerts.**
- Improved customer experience with faster response times and **global content delivery via Azure Front Door/CDN.**

PROJECT

Project 4: Automated Cloud Cost Optimization & Governance Framework

Role: DevOps Engineer
Tech Stack:

- Azure Cost Management & Billing, Azure Policy, Terraform, Azure Functions, Python, Azure Monitor, Log Analytics, Prometheus, Grafana, Azure Budgets, Azure Advisor, Azure Logic Apps, Microsoft Teams integrations

Description:

Developed an automated **Azure-focused cloud cost optimization and governance framework** using Infrastructure as Code and policy-driven enforcement. Defined standardized **cost tagging and cost allocation policies** and enforced them using **Terraform and Azure Policy.** Built **Azure Functions** to continuously monitor resource utilization and trigger automated actions such as idle resource shutdowns and rightsizing recommendations. Integrated **Azure Cost Management and Billing APIs** for anomaly detection and spend analysis. Delivered **custom cost and usage dashboards** by combining Prometheus metrics with Azure cost data to provide real-time visibility for engineering and finance teams.

Roles & Responsibilities:

- Defined and implemented **Azure-wide cost allocation and tagging standards** enforced via Azure Policy and Terraform.
- Automated detection and remediation of **orphaned, idle, and underutilized Azure resources.**
- Developed **Python-based Azure Functions** for cost governance, automation, and rightsizing recommendations.
- Built **centralized cost dashboards** using Grafana, Prometheus, and Azure Monitor data sources.
- Integrated **Azure Budgets and alerts** for proactive cost control and anomaly detection.
- Collaborated with **finance and engineering teams** to define cost KPIs, thresholds, and chargeback/showback models.
- Implemented **Teams-based notifications** and workflows for cost alerts, approvals, and action tracking.
- Provided **cost optimization insights** during architecture and design reviews.

Impact / Achievements:

- Reduced **idle Azure resource costs by 35%** within six months through automated optimization.
- Improved **tagging compliance from 50% to 95%** using policy-driven enforcement.
- Enabled **near-real-time cost anomaly detection**, preventing budget overruns.
- Automated shutdown of unused Azure resources, saving approximately **$120K annually.**
- Delivered **high-visibility cost dashboards** shared across engineering, finance, and leadership teams.
- Enabled **proactive spend management and accurate forecasting** through continuous cost monitoring and governance controls.
- Reduced **wasted spend in non-production environments** by enforcing scheduled shutdowns.
- Improved **forecast accuracy** by correlating historical cost data with usage patterns.

Project 5: FitTrack Cloud Platform – CI/CD & DevSecOps

Role: DevOps Engineer
Tech Stack:

- AWS (EKS, EC2, S3, IAM, CloudWatch), Jenkins, Docker, Kubernetes, Helm, Terraform, GitHub, SonarQube, Trivy, Nexus, Prometheus, Grafana, Jira

PROJECT

Description:

Developed and automated a **cloud-native health and fitness tracking platform** that supports real time analytics, personalized user insights, and secure data handling. Modernized CI/CD **pipelines with Jenkins declarative pipelines and shared libraries** to establish pipeline-as-code and governance across microservices. Implemented **parallel testing, containerized build agents, and shift-left security (SAST, DAST, SCA, IaC scans)** to ensure compliance and prevent vulnerabilities. Leveraged Kubernetes on AWS EKS for scalable orchestration, with automated rollbacks and approval gates to maintain uptime and reliability.

Roles & Responsibilities:

- Designed and implemented **Jenkins declarative pipelines** with shared libraries for consistent CI/CD workflows.
- Automated **infrastructure provisioning with Terraform** and deployed Kubernetes clusters on AWS EKS.
- Configured **containerized build agents** and optimized pipelines with caching and parallel testing.
- Embedded **DevSecOps practices by** integrating SAST, DAST, SCA, IaC scans, and secret detection as quality gates.
- Managed **artifact versioning in Nexus** and container images in Amazon ECR.
- Set up **monitoring and alerting** using Prometheus and Grafana dashboards for proactive health checks

Impact / Achievements:

- Reduced **build and test feedback cycles by 60%** through pipeline parallelization and distributed agents.
- Prevented **critical vulnerabilities from reaching production** by enforcing policy-as-code security gates.
- Improved **deployment frequency and lead time** in line with DORA metrics, achieving faster time to-market.
- Enhanced platform **scalability and reliability** by deploying workloads on Kubernetes with auto scaling and rollbacks.
- Strengthened compliance posture, aligning with **healthcare standards (HIPAA/GDPR)** for sensitive user data.
- **Standardized CI/CD governance** across multiple microservices by implementing reusable Jenkins shared libraries, reducing pipeline drift and maintenance overhead.
- **Improved pipeline stability** and **success rates** through automated retries, intelligent stage timeouts, and failure isolation.
- **Accelerated developer productivity** by introducing self-service CI/CD pipelines with pre-approved templates and quality gates.
- **Reduced mean time to recovery (MTTR)** through automated rollbacks, real-time alerts, and health-based deployment strategies on EKS.

PERSONAL DETAILS

Father's Name: Dinesh Mittal

Date of Birth: 06th September, 2002

Languages: English, Hindi

Marital Status: Unmarried

Gender: Male