Ranjan Kumar Upadhyay

Cloud / DevOps Engineer
rajankumarup56@zohomail.in — GitHub — LinkedIn

Professional Summary

Cloud / DevOps Engineer with hands-on experience designing secure AWS-based monitoring systems, CI/CD automation pipelines, and Infrastructure as Code deployments. Strong foundation in cloud security, incident detection workflows, infrastructure provisioning, and production-ready monitoring strategies. Actively preparing advanced DevOps practices aligned with scalable, resilient, and secure cloud environments.

Technical Skills

- **Cloud Platform:** AWS (EC2, S3, IAM, CloudTrail, CloudWatch, SNS, KMS, RDS)
- **Infrastructure as Code:** Terraform (modular configuration, state management, EC2/IAM/S3 provisioning)
- **CI/CD:** Jenkins (multi-stage pipeline: build, test, deploy), Git-based workflow
- **Monitoring & Logging:** CloudWatch Logs, Metric Filters, Alarms, centralized logging architecture
- **Security:** IAM least privilege, encrypted storage (KMS), security event detection, log retention policies
- **DevOps Tools:** Git, GitHub, Linux fundamentals, cron scheduling (UTC awareness)

Projects

AWS CloudTrail – CloudWatch Security Monitoring System

GitHub Repository

- Designed centralized AWS activity monitoring capturing management and data events across services.
- Integrated CloudTrail with CloudWatch Log Groups enabling near real-time log analysis and event tracking.
- Created 5+ Metric Filters detecting unauthorized API calls, root account usage, and IAM policy changes.
- Designed alert-driven incident detection workflow using CloudWatch Alarms integrated with SNS notifications.
- Implemented encrypted log storage using AWS KMS ensuring secure log retention and disaster recovery readiness.
- Applied IAM least-privilege policies to secure monitoring resources.
- Simulated security events to validate end-to-end alert pipeline and incident response workflow.

CI/CD Automation & Infrastructure Provisioning

GitHub Repository

- Designed and implemented multi-stage Jenkins CI/CD pipeline including build, automated testing, and deployment stages.
- Followed Git-based version control workflow supporting iterative and structured deployment cycles.
- Provisioned AWS infrastructure using Terraform (EC2 instances, IAM roles, S3 buckets).
- Developed modular Terraform configurations (main.tf, variables.tf, outputs.tf) enabling reusable infrastructure templates.
- Managed Terraform state ensuring consistent and repeatable infrastructure provisioning.
- Automated environment provisioning reducing manual deployment effort and configuration inconsistencies.

Education

Master of Computer Applications (MCA) – Cyber Security — Pursuing
Jain (Deemed-to-be-University), Bengaluru
Program curriculum aligned with BCS (British Computer Society), UK standards.

Bachelor of Computer Applications (BCA) — Completed
Veer Kunwar Singh University, Ara