T PAVAN KUMAR

Senior Cloud Engineer | AWS Certified Security Specialty | Cloud Governance, Compliance & FinOps Specialist

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PROFESSIONAL SUMMARY

Results-driven Senior Cloud Engineer with 7+ years of cloud and IT experience, specializing in cloud governance, compliance, FinOps, and infrastructure automation at enterprise scale. Currently managing 200+ AWS accounts at CDK Global, delivering cost optimization, security compliance, patch management, and automated resource lifecycle management across a large multi-account AWS Organization. Previously delivered cloud migrations, infrastructure automation, and security hardening for Google through Gameopedia and for Agilent Technologies at Deloitte USI. AWS Certified Security – Specialty and AWS Certified Solutions Architect – Associate, with hands-on expertise in AWS Organizations, Cost Explorer, CUDOS dashboards, Security Hub, IAM governance, CloudFormation, and Python/Bash automation. Adept at translating complex cloud governance and security requirements into scalable, automated solutions that reduce cost, eliminate risk, and maintain compliance at scale.

CORE COMPETENCIES

Multi-Account AWS Governance (200+ Accounts) · AWS Organizations & SCPs · FinOps & Cost Optimization · CUDOS / Cloud Intelligence Dashboards · Security Compliance & Auditing · Patch Management (SSM) · EC2 & RDS Lifecycle Auditing · Service Account Auditing · Unused Resource Detection & Cleanup · IAM Governance & Least Privilege · Cloud Security (WAF, GuardDuty, Security Hub, Macie, Inspector) · Infrastructure as Code (CloudFormation) · CI/CD Pipelines (Jenkins) · Containerization (Docker, ECS, ECR) · Monitoring (CloudWatch, Prometheus, Grafana, DataDog) · Scripting Automation (Python, Bash) · Lift & Shift Cloud Migrations · Linux Administration

PROFESSIONAL EXPERIENCE

Senior Cloud Engineer — Governance & Compliance | CDK Global Pvt Ltd | Jan 2025 – Present

Product-Based | Multi-Account AWS Governance | 200+ AWS Accounts Under Management

- Own end-to-end cloud governance and compliance across 200+ AWS accounts within a centralized AWS Organization, ensuring consistent security posture, cost discipline, and policy enforcement at enterprise scale
- Architect and automate unused resource detection and cleanup pipelines using Python (Boto3) and Lambda, identifying and decommissioning idle EC2 instances, unattached EBS volumes, stale snapshots, unused Elastic IPs, and orphaned load balancers — delivering recurring monthly cost savings across the account fleet
- Design and maintain CUDOS (Cloud Intelligence Dashboard) and Cost Intelligence Dashboard deployments, providing business-facing visibility into per-account, per-service, and per-team AWS spending patterns to drive FinOps decisions
- Lead bi-annual EC2 and RDS audit cycles across 200+ accounts — evaluating instance utilization, right-sizing opportunities, reserved instance coverage, and RDS idle connections — producing audit reports with actionable remediation recommendations
- Manage enterprise-wide patch management program using AWS Systems Manager (SSM) Patch Manager, enforcing patch baselines across EC2 fleets in all accounts and generating compliance reports for security and audit teams
- Conduct periodic Service Account audits across the AWS Organization — reviewing IAM user access keys, programmatic credentials, unused permissions, and stale service accounts — enforcing least-privilege hygiene and eliminating dormant credential risk
- Implement and enforce AWS Security Hub standards (CIS AWS Foundations Benchmark, AWS Foundational Security Best Practices) across all accounts, triaging findings, assigning remediation ownership, and tracking mean time to remediation (MTTR)
- Develop Python and Bash automation scripts integrated with Lambda and EventBridge for scheduled governance tasks — including cost anomaly alerting, resource tagging enforcement, and compliance drift detection
- Collaborate with product and platform teams to implement AWS Budgets and cost allocation tag strategies, enabling accurate chargeback and showback reporting at team and project level
- Maintain and refine SCP (Service Control Policy) guardrails within AWS Organizations to prevent policy violations, restrict risky service usage, and enforce region-level access controls across all accounts
- Produce governance reporting dashboards and monthly cloud health summaries for senior leadership, covering security compliance scores, cost trends, patch compliance %, and audit findings resolution status

Senior Cloud Engineer | Deloitte USI Private Limited (via Quess Corp) | Sep 2023 – Nov 2024

Client: Agilent Technologies | Project: ETL Framework with AWS Data Lake

- Engineered automated EC2 snapshot and backup pipelines using CloudFormation, reducing manual backup effort and ensuring RTO/RPO compliance for mission-critical production workloads
- Led AWS cost optimization initiatives by analyzing Cost Explorer data, right-sizing underutilized instances, and implementing Savings Plans — delivering measurable infrastructure cost reduction
- Executed Lift & Shift migration of on-premises workloads to AWS using Application Migration Service, ensuring data integrity and zero production SLA breaches
- Developed reusable CloudFormation templates automating resource provisioning (EC2, VPC, RDS, IAM, S3), reducing deployment cycle time and enabling self-service infrastructure for development teams
- Monitored AWS infrastructure using CloudWatch dashboards and alarms, proactively resolving performance anomalies before customer-facing impact
- Hardened cloud security posture by enforcing least-privilege IAM policies, enabling MFA enforcement, and implementing Security Hub findings remediation workflows
- Authored infrastructure runbooks and technical documentation, accelerating team onboarding and serving as primary cloud technical reference for the engagement

Senior Cloud Engineer | Gameopedia Data-Solutions Private Limited | Aug 2022 – Aug 2023

Client: HRK Gaming (hrkgame.com) | Client: Google — CCMT Project

- Architected multi-AZ VPC infrastructure supporting high-availability gaming platform (hrkgame.com), achieving 99.9%+ uptime via redundant ALB configuration and Route 53 health-check failover
- Integrated layered cloud security (WAF, GuardDuty, Security Hub, SSL/TLS) across production environments, reducing security findings and maintaining compliance posture for client environments
- Delivered scalable CloudFormation-managed cloud infrastructure for Google's CCMT project, supporting high-concurrency workloads with auto-scaling EC2 instances and multi-AZ RDS
- Optimized S3 with versioning, lifecycle policies (S3 → Glacier), and static web hosting, reducing archival storage costs and ensuring data durability
- Led VM migration from on-premises to AWS EC2, completing transition with minimal downtime and full data integrity validation

Senior Cloud Engineer | Neobric IT Solutions Private Limited | Jan 2022 – Aug 2022

Clients: Smart Counseling (CA) | Unytalk

- Managed end-to-end AWS infrastructure for multiple clients as the primary cloud technical contact, handling architecture decisions, incident response, and cost optimization strategy
- Implemented Site-to-Site VPN (OpenSwan) between on-premises data centers and AWS VPCs, establishing secure encrypted hybrid connectivity
- Automated S3 backup workflows and EC2 snapshot lifecycles using Bash scripts, eliminating manual data transfer and improving disaster recovery posture
- Deployed WAF, GuardDuty, Security Hub, and Network ACLs to strengthen perimeter security across client environments
- Spearheaded cloud cost optimization — right-sizing EC2 instances, implementing lifecycle policies, and recommending Reserved Instance coverage to reduce client cloud spend

Cloud Engineer | TechSolvent Software Technologies Private Limited | Jul 2018 – Dec 2021

Clients: XPEL & TITNET | Coempt Eduteck Private Limited

- Designed and configured multi-AZ VPCs with CIDR planning, public/private subnets, security groups, NACLs, route tables, and VPC endpoints for enterprise client environments
- Established Site-to-Site VPN tunnels (OpenSwan) and administered Compute services (EC2, Auto Scaling, ALB), maintaining high availability and scalability across production environments
- Deployed AWS security services (WAF, Inspector, GuardDuty, Security Hub) and automated infrastructure via CloudFormation, reducing configuration drift and vulnerability exposure
- Managed EC2 snapshot lifecycles, S3 cross-account replication, and lifecycle policies, optimizing storage costs and maintaining disaster recovery readiness
- Implemented cost optimization strategies — idle resource cleanup, non-production scheduling, Reserved Instance recommendations — reducing infrastructure spend for client accounts

TECHNICAL SKILLS

Cloud Platform: Amazon Web Services (AWS) — EC2, EBS, S3, RDS, VPC, Route 53, ALB, Auto Scaling, Lambda, EventBridge, SSM, SES, Workspaces, FSx, Directory Services, Direct Connect

Governance & Compliance: AWS Organizations, SCPs, AWS Config, Security Hub (CIS & FSBP), AWS Audit Manager, IAM Access Analyzer, Service Control Policies

FinOps & Cost Management: AWS Cost Explorer, CUDOS Dashboard, Cloud Intelligence Dashboards, AWS Budgets, Cost Allocation Tags, Savings Plans, Reserved Instances, Trusted Advisor

Patch Management: AWS Systems Manager (SSM) Patch Manager, Patch Baselines, Maintenance Windows, Compliance Reporting

Auditing & Automation: EC2 & RDS Lifecycle Auditing, Service Account Audits, IAM Key Rotation, Unused Resource Cleanup (Python/Boto3/Lambda), Scheduled EventBridge Automations

Infrastructure as Code: AWS CloudFormation (stacks, nested stacks, change sets, drift detection)

Cloud Security: WAF, GuardDuty, Security Hub, Inspector, Macie, IAM (least privilege, MFA enforcement), ACM, Network ACLs, VPC Security Groups

CI/CD Pipelines: Jenkins, Bitbucket Pipelines, AWS CodePipeline, AWS CodeBuild, AWS CodeDeploy

Containerization: Docker, AWS ECS (EC2 & Fargate), AWS ECR

Monitoring & Observability: Amazon CloudWatch, Prometheus, Grafana, DataDog

Scripting & Automation: Python (Boto3, Lambda automation, resource auditing), Bash (cron automation, backup scripts, CLI pipelines)

Migration Tools: AWS Application Migration Service, AWS DMS, Direct Connect

Code & Image Scanning: SonarQube (SAST), Trivy (container image scanning)

Version Control: Git, GitHub, Bitbucket

Operating Systems: Amazon Linux 2/2023, Ubuntu Server, Windows Server 2016/2019

Databases: Amazon RDS (MySQL, PostgreSQL), RDS Multi-AZ, Read Replicas

Currently Learning: Terraform, Kubernetes (EKS), GitHub Actions, AWS CDK

CERTIFICATIONS

- **AWS Certified Security – Specialty** — Amazon Web Services | *Active* | *Issued Sep 2025* | *Expires Sep 2028*
- **AWS Certified Solutions Architect – Associate (SAA-C03)** — Amazon Web Services | *Active*

KEY ACHIEVEMENTS

- Deployed CUDOS Cloud Intelligence Dashboards providing organization-wide FinOps visibility, enabling data-driven cost decisions for senior leadership across 200+ accounts
- Delivered cloud infrastructure for Google through Gameopedia and migration solutions for Agilent Technologies at Deloitte USI, including a Lift & Shift migration with zero production SLA breaches

EDUCATION

Bachelor of Commerce — Computers (B.Com Computers)

Osmania University, Hyderabad | Graduated: 2016