

MUNAGALA KARTHIK

Cloud Engineer | AWS & OCI | Kubernetes & Containers | IAM & Cloud Security

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PROFESSIONAL SUMMARY

Cloud Engineer with hands-on production experience in **AWS** and **OCI**, focused on cloud infrastructure design, IAM and access governance, security posture management, container orchestration with **Kubernetes (EKS)**, Docker, and ECS, and Python/boto3 automation. Delivered measurable outcomes including a **40% reduction in access risk**, **60% reduction in operational overhead**, and **30% improvement in MTTR** across multi-cloud environments. Experienced in production troubleshooting, incident root-cause analysis, **cloud migrations with zero service disruption**, and CIS benchmark-driven remediation. Committed to building secure, reliable, and well-architected cloud infrastructure aligned with business and compliance requirements.

TECHNICAL SKILLS

- **Cloud Platforms:** AWS, Oracle Cloud Infrastructure (OCI), Multi-Cloud Operations
- **Compute & Networking:** EC2, ECS, EKS, Lambda, VPC, Subnets, Security Groups, Route 53, CloudFront, API Gateway
- **Containers & Orchestration:** Kubernetes, Amazon EKS, Docker, Amazon ECS, kubectl, Deployments, Services, ConfigMaps, Namespaces
- **Storage & Databases:** S3, RDS, DynamoDB, OCI Object Storage
- **IAM & Security:** AWS IAM (policies, roles, groups), Cognito, KMS, Secrets Manager, WAF, OCI IAM, Compartments, Quota Policies, Least-Privilege Access, MFA
- **Monitoring & Observability:** CloudWatch, CloudTrail, AWS Config, OCI Audit Logs, Steampipe, Powerpipe
- **Infrastructure as Code & DevOps:** Terraform, Ansible, Docker, Kubernetes manifests, Git, CI/CD pipelines, Bash/Shell scripting
- **Programming:** Python (boto3, cloud automation and CSPM scripting)
- **OS & Environments:** Linux, macOS
- **Frameworks & Standards:** CIS Benchmarks, AWS Well-Architected Framework, Incident Response
- **AI & LLMs:** LangChain, LangGraph, LLM/RAG Frameworks, Claude, ChatGPT, GitHub Copilot

PROFESSIONAL EXPERIENCE

NovaGuard Tech LLP, Cloud Engineer

Jan 2025 – Present

- Designed and enforced least-privilege IAM policies and access controls across multi-account AWS and multi-compartment OCI environments, reducing unauthorized access risk by **40%**.
- Built Python/boto3 scripts to automate recurring cloud administration and security posture audits, reducing manual operational overhead by **60%**.
- Investigated production incidents using CloudWatch Logs, CloudTrail, and service logs, performed root-cause analysis and implemented targeted remediations, reducing MTTR by **30%**.
- Drove cloud security posture management (CSPM) through CIS benchmark assessments across **3** environments, tracking misconfigurations through identification to closure.
- Planned and executed **cloud migrations** and production cutovers, including migration sequencing, data integrity validation, DNS switches, and post-cutover verification, with **zero data loss** and **zero service disruption**.
- Managed day-to-day production operations on AWS and OCI: VPC configuration, EC2 lifecycle management, containerized workloads on ECS and Kubernetes (EKS), S3 storage administration, and translating product requirements into scalable, secure infrastructure designs.
- Maintained IAM access-control review records and authored infrastructure design documentation and runbooks adopted as team knowledge-base standards.

PROJECTS

eTaxVault — AWS/OCI Production Cloud Foundation | Cloud Infrastructure Engineer

- Architected and deployed the full production cloud foundation on AWS and OCI for a commercial product launch, covering compute (EC2/ECS/EKS), container orchestration with Kubernetes and Docker, storage (S3/RDS/DynamoDB), networking (VPC), and security (Cognito, KMS, WAF, IAM).
- Packaged application workloads as Docker images and deployed them using Kubernetes constructs (Deployments, Services, ConfigMaps) on Amazon EKS/ECS, with health checks and rolling updates for zero-downtime releases.
- Implemented least-privilege IAM policies, separation of duties, and Secrets Manager integration to enforce secure access patterns from day one.
- Produced deployment dependency maps and operational runbooks, enabling smooth cross-functional handoffs and reducing post-launch support overhead.

Securden — Multi-Region Legacy Infrastructure Remediation | Remediation Engineer

- Diagnosed and resolved production infrastructure defects outstanding for 3–4 years across multiple AWS regions, restoring operational stability.
- Hardened and redeployed cloud infrastructure with corrected configurations, implemented validation checks to prevent recurrence and improve long-term maintainability.

OCI Tenancy-Wide Access Governance | Access Governance Designer

- Designed and implemented a multi-layer OCI access-control model across the full tenancy using OCI IAM, compartments, and quota policies.
- Applied least-privilege principles to enforce team-level separation of responsibilities, significantly reducing standing permissions and access sprawl.

Dollarmed — Cloud & Data Migration to Symptomax | Migration Engineer

- Orchestrated end-to-end domain cutover and data migration from a legacy environment to the Symptomax platform, achieving zero data loss and minimal service disruption.
- Defined migration sequencing, pre-cutover validation checklists, DNS switch procedures, and rollback strategies, establishing a repeatable migration playbook.

Gather & Glow — AWS Platform Engineer

- Built a secure, end-to-end serverless platform on AWS using Lambda, API Gateway, DynamoDB, Cognito (Google SSO + OTP), Stripe, S3, and CloudFront.
- Documented the architecture as an internal reference for serverless security patterns and identity integration, adopted as a team benchmark.

CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

- **AWS Certified Developer Associate (DVA-C02) Coursework**, Udemy / Stephane Maarek (Jan 2026)
- **Machine Learning and AI with Python**, HarvardX / edX (Jun 2024)
- **Machine Learning with Python: A Practical Introduction**, IBM / edX (Jun 2024)

EDUCATION

B.Tech, Computer Science & Engineering (AI & ML Specialisation)

2021 – 2025

Siddhartha Institute of Science and Technology, Puttur (Affiliated to JNTUA)