A. Irwin

SENIOR DEVOPS ENGINEER

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PROFESSIONAL SUMMARY

Senior DevOps Engineer with 5+ years of experience in AWS cloud infrastructure and Kubernetes platform operations. Owns Amazon EKS and Kubernetes platform reliability, security, scaling, upgrades, workload operations and operational standards. Specializes in Kubernetes Platform Engineering, Site Reliability Engineering (SRE), AWS Cloud Infrastructure, Infrastructure Automation, and Observability and Reliability Engineering. Delivered AWS cost reductions of approximately 30–40% and automated customer onboarding workflows with Python. Hands-on with Terraform, Ansible, Jenkins, GitHub Actions, Docker and Grafana-stack observability; working knowledge of SLI/SLO/SLA, error budgets, incident management, capacity planning and disaster recovery.

TECHNICAL SKILLS

Cloud & Infrastructure: AWS (EC2, EKS, ECS, VPC, IAM, S3, RDS, ElastiCache, EFS, ALB, Route 53, CloudFront, Lambda, CloudTrail)

Kubernetes & Containers: Kubernetes, Amazon EKS, Amazon ECS, k0s, k3s, Helm, Docker, Podman, Docker Compose, Docker Swarm; Cilium (lab)

Infrastructure as Code & Automation: Terraform, Ansible, Python, Bash, Go (personal projects), configuration management, workflow automation

CI/CD & GitOps: Jenkins, GitHub Actions, Bitrise, Fastlane, build and deployment automation; GitOps delivery (lab)

Networking & Security: AWS VPC networking, peer-to-peer VPN, WireGuard, SFTP, IAM, HashiCorp Vault (personal projects), bastion-host access

Observability & Telemetry: Grafana, Loki, OpenTelemetry, Amazon CloudWatch, Sentry, centralized logging, alerting; Mimir, Tempo, Prometheus, VictoriaMetrics, VictoriaLogs (personal projects)

SRE & Reliability Engineering: SLI/SLO/SLA, error budgets, incident management and response, root cause analysis (RCA), capacity planning, disaster recovery, high availability

AI-Assisted Operations: Amazon Bedrock and Amazon QuickSight (production); Qwen 3.5 4B, Model Context Protocol (MCP) integrations (personal projects)

PROFESSIONAL EXPERIENCE

Senior DevOps Engineer | Equipo Business Solutions Apr 2023 – Present

Thiruvananthapuram, India

- Own Amazon EKS and Kubernetes platform operations, covering reliability, security, scaling, cluster upgrades, workload operations and operational standards.
- Architect and manage AWS infrastructure for application workloads across compute, networking, storage and container services, using Terraform and Ansible for Infrastructure as Code and configuration management.
- Reduced AWS infrastructure costs by approximately 30–40% through instance right-sizing, Spot capacity optimization and storage-tiering improvements.
- Automated customer SFTP, peer-to-peer VPN and Amazon S3 onboarding workflows with Python, reducing manual customer onboarding effort.
- Build and maintain CI/CD pipelines for mobile and web applications using Jenkins, GitHub Actions and Bitrise, improving release consistency and reducing manual delivery effort.
- Operate container workloads across Amazon EKS, ECS, k0s, k3s and Docker Swarm, with a focus on availability, scalability and operational reliability.
- Troubleshoot production incidents using metrics, logs and traces (CloudWatch, Grafana, Loki, OpenTelemetry) and drive root cause analysis.
- Containerize legacy and modern applications with Docker and Podman for consistent environments across development and deployment stages.
- Support generative AI and analytics workloads on Amazon Bedrock and Amazon QuickSight.
- Partner with development teams to streamline delivery workflows and improve deployment security, speed and reliability.

Cloud Support Engineer | Incedo Inc. May 2021 – Apr 2023

Chennai, India

- Monitored AWS environments using Amazon CloudWatch metrics and logs to identify service degradation and protect availability.
- Troubleshot infrastructure issues across EC2, S3, RDS and VPC networking, coordinating with engineering teams to restore service.
- Investigated cloud-service failures and implemented operational improvements to strengthen system reliability.
- Configured proactive monitoring and alerting to improve issue detection and reduce the risk of prolonged service disruption.

PROJECTS & OPEN SOURCE

Kubernetes Job Management Platform (Go) | *In Progress*

Developing a Go-based application with a web UI for centralized management of Kubernetes Jobs across multiple environments. Designed to be cluster-agnostic, targeting Amazon EKS, upstream Kubernetes, k0s, k3s and OpenShift, with Helm-based deployment and a goal of simplifying Job lifecycle management.

AI-Assisted Kubernetes Incident Analysis | *Personal project*

Building an incident-analysis workflow around a Qwen 3.5 4B-parameter language model, using DevOps-focused technical data collected through web scraping. Integrates Amazon EKS, Prometheus/VictoriaMetrics and Loki/VictoriaLogs through MCP servers to correlate Kubernetes context, metrics and logs and generate structured incident reports.

Self-Hosted Hoppscotch on Amazon EKS

Deployed Hoppscotch as a self-hosted API development and testing platform on Amazon EKS using Helm-based deployment, and operate it to keep the tool available and accessible to development teams.

Kubernetes Platform Engineering Lab | *In Progress*

Developing a reusable Kubernetes platform architecture on AWS EKS, focused on Terraform, Cilium networking, GitOps delivery, workload autoscaling, secrets management and centralized observability.

monitorHub | *Lightweight LGTM Observability Stack*

Designed a low-resource observability stack using Loki, Grafana, Tempo and Mimir for Kubernetes and Docker Compose environments, providing centralized logs, metrics and distributed tracing to improve troubleshooting and service visibility.

loki-django-logger | *PyPI Package*

Developed and published a lightweight Django logging package that forwards application logs to Grafana Loki with gzip compression for efficient log transfer.

Secure Server Manager

Built a server-management tool for orchestrating updates through bastion hosts, using HashiCorp Vault, FastAPI and React.js.

Rapid VPN Deployment

Created a Docker Compose-based WireGuard VPN deployment with a React.js interface.

EDUCATION

Bachelor of Engineering in Electronics & Communication 2014 – 2018

CSI Institute of Technology, Thovalai

AWARDS

3× Ace Performer of the Quarter | Equipo Health

PROFESSIONAL DEVELOPMENT

AWS Certified Solutions Architect – Associate preparation course (Udemy), 2026

Online training course; not an AWS-issued certification.