

INERASTRUCTURE LEAD · SECURITY ANALYST

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"A tinkerer with a curious mind"

Summary ₋

Results-driven Infrastructure Engineer with 6+ years of experience architecting and implementing scalable cloud solutions. Demonstrated expertise in optimizing infrastructure costs while maintaining 99.99% SLA for systems supporting 4M+ daily active users. Proficient in Kubernetes, AWS, and modern DevOps practices with a strong focus on automation, security, and performance optimization. Skilled troubleshooter with deep knowledge of networking, databases, storage, and serverless technologies. Adept at collaborating with cross-functional teams to deliver robust infrastructure solutions that align with business objectives and budgetary constraints.

Experience ____

TrueFoundry India

SENIOR SITE RELIABILITY ENGINEER (SRE)

Sept. 2024 - Present

Driving multi-cloud adoption strategy by building flexible onboarding solutions that work across AWS, GCP, Azure and on-prem environments. Tackling complex infrastructure challenges while ensuring clients can deploy ML workloads anywhere with consistent security and performance.

- Built a modular **Terraform** framework that slashed client onboarding time by 70%, enabling seamless deployment across **AWS**, **Azure**, **GCP**, and on-premises environments with minimal configuration changes.
- Created Marketplace listings for major cloud providers, resulting in a 40% increase in self-service customer acquisition and significantly reducing sales engineering overhead.

Primetrace (Kutumb Crafto)

India

Infrastructure Lead (Founding Engineer)

Feb. 2021 - Sept. 2024

Architected and implemented scalable infrastructure on **AWS** utilizing self-hosted Kubernetes that successfully supported **4M DAU** with peak loads of **1M RPM**. Implemented comprehensive monitoring using **RED** and **USE methodologies** with **Prometheus**, **Grafana**, **Elastic-APM**, **Pyroscope**, **Loki**, and **Robusta** for proactive issue detection and resolution.

- Reduced annual cloud expenditure by \$200K through strategic implementation of self-hosted services, efficient pod/node binpacking, spot instance utilization, and optimization of network flow logs and metrics volume.
- Designed and maintained highly available multi-broker **Apache Kafka** clusters and multi-node **ELK Stack** on spot instances, ensuring data resilience while minimizing costs.
- Enhanced cluster security posture by implementing comprehensive network policies and role-based access control (RBAC) configurations, significantly reducing potential attack vectors.
- Accelerated deployment pipeline efficiency by reducing deployment times to under one minute through implementation of self-hosted **GitHub-Runners** on spot instances integrated with **ArgoCD** and **Devtron**.
- Expanded global reach by implementing IPv6 support across the infrastructure stack and integrating AWS Global Accelerator to reduce latency for international markets.
- Deployed and maintained **OpenVPN** within the **Kubernetes cluster**, streamlining secure connectivity between on-cluster services and development environments.
- Achieved 99.99% uptime while running stateless workloads on 95% spot instances through implementation of intelligent time-based scaling and node hibernation strategies during low-traffic periods.
- Led the integration of a comprehensive observability stack encompassing centralized monitoring,

Application Performance Monitoring (APM), distributed tracing, logging, profiling, and alerting systems.

smallcase India

DEVOPS ENGINEER Feb. 2019 - Sep. 2020

Managed critical infrastructure components including **OpenVPN**, **Heartbeat**, **Elastalert**, and **Grafana** while integrating essential developer tools such as **Wiki.js**, **Sentry**, and **JFrog Artifactory**. Developed and maintained **Ansible** automation for infrastructure deployments, log rotation, backup procedures, and monitoring agents. Optimized CI/CD pipelines in **Jenkins** and **AWS CodeDeploy** to enhance deployment reliability and efficiency.

- Spearheaded infrastructure cost optimization initiatives resulting in a 90% reduction in operational expenses while maintaining service quality and performance.
- Implemented **HAProxy** load balancing solution to enhance network performance and reliability, resulting in measurable improvements in application response times.
- Enhanced developer productivity by integrating and configuring open-source observability tools including Elastic-APM, Kafka-manager, and Kafka-topics-ui.
- Designed and deployed fault-tolerant data processing infrastructure utilizing multi-broker **Apache Kafka** clusters and distributed **ELK Stack** on cost-effective spot instances.

Udacity Remote

TECHNICAL MENTOR Apr. 2018 - Present

Provide expert guidance and project reviews for students in Android and Python Development courses, evaluating technical implementations and offering constructive feedback to enhance learning outcomes.

Utopian.io Remote

OPEN SOURCE CONTRIBUTOR

Jun. 2018 - Present

Perform comprehensive bug reviews and quality assurance for multiple open-source projects, contributing to improved software reliability and security while collaborating with global development teams.

Skills

Cloud Platforms AWS, Azure, GCP, Terraform, CloudFormation, Spot Instances **Containerization** Kubernetes, Docker, Helm, Kustomize, ArgoCD, GitOps

InfrastructureInfrastructure as Code (IaC), Linux, IPv6, Ansible, Jenkins, GitHub ActionsNetworkingIstio, Traefik, HAProxy, Load Balancing, RBAC, Network Policies, OpenVPNObservabilityPrometheus, Grafana, Loki, ELK Stack, Elastic-APM, Tempo, Distributed TracingData SystemsApache Kafka, Redpanda, RabbitMQ, PostgreSQL, MySQL, Redis, Airbyte

Programming Python, Bash, Go, Git, CI/CD Pipelines, dbt, Airflow, Spark

Education

Chitkara University Punjab, India

B.E. IN COMPUTER SCIENCE AND ENGINEERING

2016 - 2020

Graduated with **9.29 CGPA** (Distinction) with specialization in Cyber-Security Coursework: Distributed Systems, Network Security, Cloud Computing, Database Management, Operating Systems

Honors & Awards _____

HACKATHONS

2024	Winner, 2x AWS-Gameday: Security, Resilience	Bangalore
2023	Runner up, AWS-Gameday: Microservices	Bangalore
2018	Winner, MSHacks 2.0 - Microsoft Hackathon	LPU, Jalandhar
2018	Runners Up, Octahacks	Chandigarh
2018	Winner, Code Breakers	CSI Chandigarh
2018	Runners Up, SAP Next-Gen Hackathon	Chandigarh
2017	Runners Up, Codex C++	CSI Punjab

Certifications

Kubernetes Certifications

LINUX FOUNDATION 2021 - 2025

- CKS: Certified Kubernetes Security Specialist (LF-fty09fzmce) Valid until June 2025
- CKA: Certified Kubernetes Administrator (LF-bl5pcg30qm) Valid until June 2025
- CKA: Certified Kubernetes Administrator (LF-4j07bu8tsj) Issued 2021

AWS Certified Solutions Architect - Associate

AMAZON WEB SERVICES (AWS)

- Credential ID: K71S1HB13NBEQT5N
- Expertise in designing distributed systems on AWS, implementing cost-effective and scalable solutions

Professional Development

UDACITY 2018

Aug. 2019 - Aug. 2024

- Android Development Nanodegree Mobile application architecture and development
- Data Structures Nanodegree Advanced algorithms and computational efficiency
- Python Foundation Nanodegree Backend development and automation
- Programming Fundamentals Nanodegree Software engineering principles