

Thejasekhar Reddy Gundlooru

Senior Software Engineer | HCLSoftware

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EXECUTIVE SUMMARY

Professional Summary

- Seasoned engineer specializing in cloud-native solution design and delivery, with deep expertise in Kubernetes, OpenTelemetry, and the Elastic Stack, plus strong skills in Linux systems, Docker and infrastructure automation.
- Proven track record in developing custom monitoring solutions, enabling platform engineering, and crafting customer-focused POCs.
- Driven by proactive R&D to consistently improve system reliability, scalability, and performance, leveraging advanced technologies to deliver strategic, high-impact results in complex technical environments.

Technical Skills

- Observability & Monitoring Tools:
 - Elastic Stack: Elasticsearch, Kibana, Logstash, Elastic APM
 - OpenTelemetry, Prometheus, FluentBit, Grafana
- Programming & Scripting:
 - Python, Shell Script, NodeJS
- Cloud & DevOps:
 - AWS, Docker, Kubernetes, Terraform, Git, GitHub, Ansible (basics), Jenkins (basics).
- Cloud Monitoring: Knowledge of AWS Cloud Monitoring, CloudWatch, X-Ray

Key Contribution

- As a Senior Software Engineer, I designed and implemented observability solutions for cloud-native platforms, enabling end-to-end visibility, proactive monitoring, and automated infrastructure insights.
- Designed and deployed log analytics workflows using Logstash and Beats for efficient data ingestion and enrichment across distributed systems.
- Designed and deployed a highly available, production-grade Kubernetes cluster using Kubeadm, HAProxy, and Keepalived on Ubuntu 22.04 with secure ingress and centralized monitoring.
- Designed and Delivered a Kubernetes observability PoC using OpenTelemetry and Elasticsearch, providing holistic observability for Java application and cluster-level monitoring.
- Developed a shell script to automate on-demand provisioning of Elasticsearch cluster for development environments.

Key Projects

- Log Analysis & Predictive Analytics using ELK Stack Client: Mashreq
- Observability & Automation Initiatives R&D Engeneering

SKILLS

Programming Skills

- Python
- NodeJs
- Shell Scripting
- SQL

Tools & Platforms

- Linux
- GIT
- GitHub
- VS Code
- Kafka

Cloud & DevOps

- AWS
- Docker
- Kubernetes
- Terraform
- Ansible (basics)
- Jenkins (basics)

Monitoring & Logging

- Elasticsearch, Logstash, Kibana (ELK Stack)
- OpenTelemetry
- · Prometheus
- FluentBit
- Grafana
- ClickHouse

EDUCATION

2019 – 2023 Nandyal, India

B.Tech - Computer Science and Engineering

Rajeev Gandhi Memorial College of Engineering and Technology CGPA: 8.6

CERTIFICATES

- Kubernetes Application Developer by KodeKloud
- ClickHouse Observability Associate
- AWS Cloud Developer Associate
- Data Streaming Engineer by Confluent
- AWS Acadamy Cloud Fundamentals

PROJECTS

2025 – present

Log Analysis & Predictive Analytics using ELK Stack | Client: Mashreq

Tech Stack: Elasticsearch, Logstash, Kibana (Elastic Stack)

- Designed and deployed log analytics workflows using Logstash and Beats for efficient data ingestion and enrichment across distributed systems.
- Leveraged Elastic ML for anomaly detection and forecasting, enabling proactive scaling, failover prediction, and improved system resilience.
- Built Kibana dashboards and automated alerting mechanisms to deliver real-time visibility into systemhealth and support rapid incident response.

08/2025 - 09/2025

[R&D] Production-Grade Kubernetes Cluster Deployment

Tech Stack: Ubuntu 22.04, Kubeadm, HAProxy, Keepalived, EDOT Agent

- Designed and deployed a high-availability Kubernetes cluster with a 3-node control plane and 5-node worker plane on on-premise Ubuntu 22.04 (Jammy) servers.
- Implemented HAProxy with Keepalived to provide a virtual IP (VIP) and DNS-based access to the API server, ensuring fault tolerance and seamless failover.
- Configured HAProxy as the ingress controller with custom SSL/TLS termination for secure, encrypted client-to-cluster communication.
- Integrated Elastic Agent for real-time cluster monitoring and observability, enabling proactive troubleshooting and system insights.

05/2025 - 06/2025

[R&D] AWS Infrastructure and ECS Fargate Monitoring Using Terraform and ADOT

Tech Stack: AWS, Terraform, OpenTelemetry(ADOT), CloudWatch

 Designed and deployed a VPC with public and private subnets, implementing secure network segmentation using Internet Gateway (IGW) for public access and NAT Gateway (NATGW) for private subnet outbound connectivity.

- Created an Amazon ECS cluster running containers on AWS Fargate, enabling serverless container orchestration and deployed sample applications to validate
- Integrated AWS Distro for OpenTelemetry (ADOT) Collector into ECS tasks, with configurations securely managed via AWS Systems Manager Parameter Store.
- · Configured telemetry collection of container metrics (CPU, memory, networking) and logs, forwarding them to Amazon CloudWatch for centralized monitoring and observability.

11/2024 - 12/2024

[R&D] Kubernetes Observability: Workload and Cluster Monitoring Solution

Tech Stack: Kubernetes, OpenTelemetry, Elasticsearch, Kibana

- Role: Designing, Planning, Implementation, Deployment.
- Designed, planned, implemented, and deployed a comprehensive observability solution for Kubernetes clusters and workloads.
- · Leveraged the OpenTelemetry Operator for seamless instrumentation, utilizing auto-instrumentation to capture telemetry data efficiently.
- Implemented multiple architectural patterns including sidecar, daemonset, and deployment approaches to optimize data collection.
- · Configured an OpenTelemetry Gateway as a centralized ingestion point before forwarding telemetry data into the observability layer (Elasticsearch and Kibana).
- Enabled enhanced cluster visibility and workload monitoring to support proactive troubleshooting and performance tuning.

05/2024 - 10/2024

[R&D] Dynamic Elasticsearch Cluster Provisioning with Docker

Tech Stack: Docker, Shell Scripting, ElasticStack

Role: Planning, Development, Testing, Deployment

- Developed an automation script for on-demand Elasticsearch cluster deployment using Docker, specifically designed for development and PoC environments.
- Enabled dynamic provisioning based on user-defined configurations, improving agility and reducing manual setup time.
- Ensured portability and repeatability by leveraging Docker Compose and shell scripting

Elastic APM Training Environment Deployment on Docker

Tech Stack: Elastic Stack, Elastic APM, Docker

Role: Planning, Deployment and Maintaining

- · Deployed and maintained a demo environment for training sessions on Elastic APM, featuring an Elasticsearch cluster and the Elastiflix application, all containerized using Docker.
- Enabled hands-on learning by integrating real-time application performance monitoring via Elastic APM in a controlled, reproducible Docker setup.