RACHANA KALLADA JAYARAJ

Boston, MA | +1 (857)-763-7511 | $\underline{\text{kalladajayaraj.r@northeastern.edu}}$ | $\underline{\text{Portfolio}}$ | $\underline{\text{LinkedIn}}$ | $\underline{\text{GitHub}}$ Availability: From May 2025

SUMMARY

Results-driven software professional with over 5 years of experience in software design, development, testing, web design, and cloud technologies. Backed by contributions to the HPE Dev Blog community, I am actively seeking full-time opportunities in full-stack and cloud development.

EDUCATION

Khoury College of Computer Sciences, Northeastern University

United States

Master of Science, Computer Science

2025

Dr. Ambedkar Institute of Technology

India

Bachelor of Engineering, Computer Science and Engineering.

2018

TECHNICAL SKILLS

Languages: Golang, Java, Python, Bash, HTML, CSS, JavaScript, TypeScript

Database & Storage: OracleDB, MySQL, Microsoft SQL Server, Amazon S3, MongoDB, DynamoDB, Google BigQuery

Cloud Platforms & Distributed Systems: AWS, HPE GreenLake Cloud, GCP, Docker, Kubernetes

CI/CD & Testing Tools: GitHub Actions, CircleCI, JFrog, Helm, ArgoCD, JUnit, Cucumber, Sonar, Cypress, Spinnaker

Monitoring, Alerting & Streaming Tools: Grafana, Prometheus, Kibana, ServiceNow, PagerDuty, Kafka, Monte Carlo, Google PubSub

Developer Tools & Frameworks: Agile, Git, Jira, Postman, Slack, Terraform, Linux, REST, React.js

WORK EXPERIENCE

Software Engineering Co-op - Mercari US

United States

Mercari US Backend & Data Engineering Department

Jun 2024 – Dec 2024

- Successfully transitioned a key Looker table to Dataform, ensuring data integrity through validation before deprecating the original table.
- Created both development and production BigQuery tables to store Mercari agent and team details by querying Dixa Agent and Team APIs, leveraging Airflow for seamless data ingestion and workflow orchestration.
- Led the migration of the Q4M worker to Google Pub/Sub, creating topics and subscriptions, updating supervisord configurations, and modifying publisher code. Monitored Pub/Sub performance and job metrics using Grafana and Loki.

Research Apprentice - Northeastern University

United States

Serverless File System (Prof: Ji-Yong Shin)

Jan 2024 - May 2024

- Automated recovery of SLFS coordinators by developing a system to detect and restore failed coordinators, ensuring high availability and eliminating single points of failure.
- Enhanced coordinator monitoring by using Zookeeper for continuous health tracking and automatic failover in a ring topology, ensuring seamless recovery and monitoring.

Cloud Developer II - Hewlett Packard Enterprise

India

Green Lake Cloud Services R&D Department

Jun 2021 - Aug 2023

- Spearheaded open sourcing of HPE repositories by overseeing all stages of OSRB review, boosting downloads by 25%.
 Improved product stability through development, unit, functional and stress testing of HPE Containers as a Service backend code for
- BareMetal & Virtual Machines. Streamlined communication between on-premises and SaaS components.
 Reduced feature time-to-market by 10% via streamlined CI/CD deployments and engineered user-friendly terraform providers, resulting in uplift in overall customer satisfaction ratings.

Systems Engineer - Tata Consultancy Services

India

IOT Department (Client: Nielsen Holdings)

Oct 2018 – Jun 2021

- Migrated client applications to AWS cloud, reducing infrastructure costs by 10% while improving scalability by 12%.
- Identified and resolved audio and video signal gaps, backend app issues using ServiceNow and developed extensive functional tests for applications written in Go, using Cucumber framework.
- Implemented efficient data monitoring and uploading via Kafka streaming and AWS S3 storage buckets, with added monitoring via Athena queries, resulting in 16% improvement in data processing times.

BLOGS

- Kubernetes Cluster as Code Part 1
- Kubernetes Cluster as Code Part 2

PROJECTS

Smart City Management System, NEU

Oct 2023 – Dec 2023

- Developed a user-friendly Flask-based web app with SQL Server, enabling city administrators and citizens to manage smart city components such as surveillance cameras, sensors, Wi-Fi zones, and smart signals.
- Enabled visualization and report generation on the GUI for the smart city data.

Load Balancer Manager, HPE

Jan 2023 - Mar 2023

- Led the development of the Load Balancer Manager, a cutting-edge application on the HPE GreenLake cloud, enabling external customers to
 effortlessly access and manage their Kubernetes clusters.
- Implemented dynamic Nginx load balancer deployment, updating configurations to enhance security and eliminate the need for SSH credentials. Developed REST API calls for load balancer creation, configuration updates, IP address retrieval, and deletion.