

Kalyankumar Vinayakabaskaran

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Professional Summary:

- Software Engineer with a year of experience in building Java web applications and managing IT infrastructure.
- Strong background in DevOps practices, with hands-on experience in Continuous Integration (CI) , Continuous Delivery (CD), Infrastructure as Code (IaC), GitOps and Containerization.
- Proficient with solving basic and fundamental data structures and algorithms.
- Experienced in architecting, deploying, and managing cloud-based infrastructure and application in AWS cloud platform.
- Experienced in development within an Agile Development Environment.
- Collaborative and team-oriented approach to work, with strong communication and problem-solving skills.
- Strong technical skills with a quick grasp of new concepts, combined with an insatiable drive for productivity improvement.

Technical Skills:

Programming Languages and Scripting : Java, Python, Shell scripting(Bash) and Groovy

Worked Cloud Providers : Amazon Web Service (AWS), Microsoft Azure and Google Cloud Platform (GCP)

Infrastructure as Code (IaC) : Terraform

Containerization Tools : Docker and Kubernetes(k8s)

Kubernetes Controller (GitOps) : ArgoCD

CI CD Tools : Jenkins, Gitlab and GitHub Actions

Version Control System : Git, Bitbucket

Databases : MySQL, PostgreSQL and NoSQL (Mongo DB)

Web Frameworks : Struts2 and Spring Boot

Servers : Ubuntu, Windows Servers(2012,2016,2019)

Certifications:

AWS Solutions Architect Associate(SAA)

Valid until November 2026

Hashicorp Terraform Associate

Valid until December 2025

Work Experience:

Junior Software Engineer

Aug 2020 – Jun 2021

Molecular Connections, Bangalore, India.

Designed and developed the migration strategy to transition legacy Struts 2 application to a modern Spring Boot microservices architecture, resulting in a 30% reduction in deployment time.

- Developed and maintained employee management applications using Struts 2 and Spring Boot frameworks.
- Utilized MySQL and MongoDB databases for data storage and retrieval in respective projects.
- Achieved a 20% improvement in application response time by optimizing database queries and indexing strategies in MySQL.
- Implemented containerization for Java web applications using Docker, resulting in a 25% decrease in deployment time and a 20% improvement in scalability and resource utilization.
- Implemented RESTful APIs for employee management functionalities, resulting in a 25% increase in API performance.
- Supported and maintained existing software systems, contributing to troubleshooting efforts and implementing enhancements to ensure optimal performance and reliability.

Education:

Post Graduate Certificate: DevOps for Cloud Computing

2023 – 2024

Lambton College, Toronto, Canada.

- Learned about major cloud providers such as AWS, Azure, and Google Cloud, including provisioning and managing cloud resources.
- Learned to implement CI/CD pipelines using Jenkins to automate the deployment process, which will result in a 30% reduction in release time.
- Acquired proficiency in Docker and Kubernetes through comprehensive coursework and hands-on practice, completing over 50 hours of online courses and practical exercises.
- Utilized Terraform to define and manage cloud Infrastructure as Code (IaC), which will improve resource provisioning efficiency by 40%
- Demonstrating hands-on expertise in Windows Server administration and Linux Server management.
- Learned to enhance the application reliability by setting up comprehensive monitoring and alerting systems, which will reduce the downtime by 25%

Bachelor of Technology: Information Technology

2016 – 2020

Anna University, Chennai, India.

- Solid foundation in computer science and programming concepts, including a proficiency in object-oriented programming (OOP) principles, and the ability to apply OOPs concepts for advanced problem-solving.
- Extensive knowledge of Linux and Windows operating systems and hands on experience on it.
- Competent in database design and management using SQL and implemented database solutions for projects.

Academic Projects:

DevSecOps – Netflix Clone Project

GitHub Link - https://github.com/KALYANKUMAR13/netflix_clone_devSecOps

A Netflix clone's DevSecOps pipeline makes sure security procedures are seamlessly integrated throughout the software development lifecycle. Used top-tier tools from the industry, like Prometheus, SonarQube, Grafana, Docker, Jenkins, and Kubernetes (k8s), to strengthen the development, deployment, and monitoring procedures.

- Jenkins for continuous integration and continuous deployment (CI/CD), streamlining the development pipeline. Implemented automated build, test, and deployment processes to enhance efficiency and reduce manual errors.
- Docker containers to encapsulate the application and its dependencies, facilitating consistent and reproducible deployments across various environments.
- Implemented Kubernetes for container orchestration, ensuring efficient scaling, load balancing, and fault tolerance. Employed declarative configurations to define the application's infrastructure, enhancing the overall stability of the deployment.
- Integrated SonarQube into the CI/CD pipeline to perform static code analysis. Conducted regular code reviews to identify and rectify security vulnerabilities and coding best practice violations.
- Implemented Grafana and Prometheus for real-time monitoring and alerting. Established comprehensive dashboards to visualize system metrics, application performance, and security-related events.

Tools Used: Git, AWS cloud Provider (EC2), Jenkins, Docker, Kubernetes, SonarQube, Grafana and Prometheus.

The DevSecOps implementation significantly improved the development lifecycle, reducing deployment times by 40%, enhancing system reliability, and fortifying the application against security vulnerabilities. The project received positive feedback from college classmates for its impact on both speed and security in the software delivery process.