Yeshwanth Kanukuntla

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Summary

Experienced Software Engineer with expertise in DevOps and environment management, focusing on scalable CI/CD pipeline strategies and infrastructure-as-code implementations. Successfully led projects that reduced deployment time by 60% and improved environment consistency by 85% through Terraform and AWS CloudFormation. Adept at designing enterprise-grade APIs and managing full-stack integrations, aiming to leverage these skills to enhance operational efficiency and streamline deployment processes within the organization.

EXPERIENCE

Planon Aug 2022 - Aug 2023

Software Engineer - DevOps & Environment Management

Hyderabad, India

- Led the design and implementation of scalable CI/CD pipeline strategies using Jenkins and AWS CodePipeline, orchestrating multi-environment deployments for 50+ cloud-hosted applications across dev, staging, and production environments, reducing deployment time by 60% and eliminating environment drift issues.
- Architected dynamic routing patterns for third-party integrations including Salesforce and external APIs, implementing environment-specific configuration management that supported parallel testing across multiple feature branches while maintaining a single shared QA endpoint.
- Spearheaded infrastructure-as-code adoption using Terraform and AWS CloudFormation, transitioning from hardcoded configurations
 to version-controlled infrastructure patterns, improving environment consistency by 85% and enabling self-service environment
 provisioning.
- Collaborated with cross-functional teams including DevSecOps, platform engineering, and application development teams to resolve long-standing CI/CD bottlenecks, implementing automated testing strategies that improved system reliability and reduced manual intervention by 75%.
- Established comprehensive monitoring and alerting frameworks using CloudWatch and custom scripts, proactively identifying infrastructure issues and performance bottlenecks across hybrid cloud and on-premises environments, improving overall system availability to 99.8%.

Indian Servers May 2021 - Jun 2022

Software Engineer - Full Stack & Platform Integration

Hyderabad, India

- Designed and implemented enterprise-grade RESTful APIs using Python FastAPI and Node.js with integrated SQL Server backends, creating automated database migration frameworks, supported seamless environment transitions reducing deployment errors by 30%.
- Built scalable microservices architecture using Docker containerization and Kubernetes orchestration, implementing service mesh patterns for improved communication between legacy VM-based applications and cloud-native containerized workloads.
- Developed comprehensive DevOps automation solutions using Python scripting and PowerShell, creating configuration management tools that standardized deployment processes across heterogeneous infrastructure, increasing system uptime by 35%.
- Led cross-functional Agile teams in implementing environment standardization initiatives, establishing repeatable patterns for feature branch testing and integration workflows that enhanced testing coverage and streamlined release management processes.
- Architected hybrid deployment strategies bridging on-premises data centers with cloud infrastructure, enabling seamless workload migration and establishing foundation for multi-environment orchestration capabilities.

PROJECTS

Enterprise Multi-Environment Orchestration Platform | Terraform, AWS, Kubernetes, GitHub Actions Aug 2025

- Architected and delivered a comprehensive multi-environment orchestration platform supporting parallel deployment patterns across cloud and on-premises infrastructure, enabling feature branch testing and M&A integration scenarios.
- Implemented dynamic routing patterns for third-party integrations (Adobe Sign, Salesforce) using AWS Route53 and Application Load Balancers, supporting multiple environments through intelligent traffic management and environment-specific configuration injection.
- Established infrastructure-as-code patterns using Terraform modules and AWS CloudFormation, creating reusable environment templates that eliminated configuration drift and enabled self-service environment provisioning for development teams.
- Integrated comprehensive monitoring using Prometheus, Grafana, and AWS CloudWatch with automated alerting via Slack and PagerDuty, achieving 99.9% environment availability and proactive issue detection across hybrid infrastructure.

Hybrid CI/CD Pipeline with Legacy System Integration | GitHub Actions, Docker, EKS, Octopus Deploy Jul 2025

- Led the strategic migration from Octopus Deploy to GitHub Actions, designing phased transition plans that maintained deployment reliability while modernizing CI/CD capabilities across containerized EKS workloads and legacy VM-based applications.
- Implemented sophisticated testing strategies including unit, integration, and end-to-end testing using Pytest, Selenium, and Cypress, achieving 95% test coverage and establishing n/n+1 component testing patterns for complex system integrations.
- Designed and deployed security-first CI/CD pipelines incorporating Trivy for container scanning, SonarQube for code quality, and AWS for fine-grained access control, ensuring compliance with enterprise security standards and audit requirements.
- Created inner-source tooling and documentation enabling cross-team adoption of standardized deployment patterns, facilitating knowledge transfer and reducing onboarding time for new development teams by 50%.

Cloud-Based API Testing Suite with Performance Analytics | Python, Pytest, REST Assured, AWS

Jun 2025

- Designed and developed a comprehensive API testing framework supporting RESTful and SOAP services with advanced validation capabilities, data-driven testing, and automated test case generation based on OpenAPI specifications.
- Implemented sophisticated performance testing capabilities using custom Python libraries and JMeter integration, providing detailed performance analytics and automated bottleneck identification for API endpoints.
- Created automated CI/CD integration with GitHub Actions and Jenkins, enabling continuous API testing with intelligent test selection based on code changes and comprehensive failure analysis and reporting.
- Built real-time monitoring and alerting systems using Prometheus and Grafana, providing continuous visibility into API health and performance metrics with automated regression detection.

Cloud-Based CI/CD Pipeline with Automated Testing | Python, Docker, Kubernetes, Terraform

Jun 2025

- Orchestrated automated testing suite with Pytest and Selenium integration, achieving 35% reduction in production defects and enabling continuous delivery with 99.9% pipeline reliability.
- Architected cloud-agnostic infrastructure using Terraform IaC, managing containerized applications across 3 major cloud platforms with automated provisioning and configuration management.
- Designed automated build-test-deploy workflows with parallel execution and rollback capabilities, improving development velocity by 50% and enabling daily production releases.
- Established infrastructure monitoring and alerting using cloud-native tools, providing real-time visibility into deployment health and application performance metrics.

EDUCATION

University of Central Missouri

Aug 2023 - May 2025

Master of Science, Cybersecurity and Information Assurance

• Coursework: Network Security, Cryptography, Digital Forensics, Algorithms, Database Systems, Cloud Computing, Machine Learning, Software Engineering, DevOps & Automation Tools

Jawaharlal Nehru Technological University

Aug 2019 - May 2023

Bachelor of Technology, Computer Science and Engineering

• Coursework: Data Structures & Algorithms, Object-Oriented Programming (Python, C++), Web Development (Full-Stack), Computer Networks, Operating Systems, Cloud Computing, Distributed Systems

TECHNICAL SKILLS

- Programming Languages: Python, C, C++, C#, Java, Bash, Powershell, TypeScript, Go
- Cloud Platform Expertise: AWS (VPC, IAM, Route53, EKS, ECS, CloudFormation), Azure (AKS, Resource Manager), GCP (GKE, Cloud Build)
- Infrastructure as Code: Terraform, AWS CloudFormation, Ansible, Pulumi, ARM Templates
- Container & Orchestration: Docker, Kubernetes, EKS, ECS, OpenShift, Helm, Service Mesh (Istio)
- CI/CD & DevOps: GitHub Actions, Jenkins, Octopus Deploy, GitLab CI, Azure DevOps, ArgoCD
- Environment & Configuration Management: Environment Orchestration, Dynamic Routing, Feature Branch Automation
- Testing & Quality Assurance: QF-Test, Selenium, Manual Testing, Regression Testing, Functional Testing, Unit Testing, Integration Testing
- Web Development: JavaScript, Node.js, React, Angular, HTML5, CSS, Express.js
- Monitoring & Observability: Prometheus, Grafana, ELK Stack, CloudWatch, DataDog, New Relic, Alertmanager
- Build Systems & Source Control: Git, GitHub, GitLab, Bitbucket, Perforce, Derived Data Cache (DDC)
- API Testing & Integration: Postman, REST APIs, SOAP APIs, RestAssured, WebSockets, Third-party Integration Patterns
- Tools and Platforms: JIRA, Confluence, Twilio, WebRTC, Slack API, PagerDuty
- Database Management: MySQL, PostgreSQL, MongoDB, Firestore, Redis, Database Migration Automation
- Security & Compliance: Trivy, SonarQube, OWASP, Security Scanning, Vulnerability Management, Compliance Automation
- Machine Learning: Transformers, GPT-3, Few-Shot Learning, PyTorch, Signal Processing, LLM Embeddings
- Enterprise Integration: Legacy System Modernization, M&A System Consolidation, Hybrid Architecture Design, Cross-team Coordination
- Other: Agile Methodology, Scrum, Root Cause Analysis, Object Oriented Programming, Realtime Systems, Inner-sourcing Practices