

# Chaithanya Machireddy

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## Professional Summary

Results-driven **Cloud & DevOps Engineer** with 4+ years of experience designing, automating, and securing enterprise infrastructure across **AWS, Azure, and hybrid environments**. Proven record of **cutting deployment times by 50%+, reducing environment drift by 80%, and maintaining 99.9% uptime** for mission-critical platforms. Expert in **Terraform, CloudFormation, Ansible, Kubernetes, Jenkins, and GitHub Actions**, with deep knowledge of observability, cost optimization, and security best practices. Recognized for building **resilient CI/CD pipelines, multi-cloud automation, and compliance-first infrastructure** that scale seamlessly from startups to enterprise workloads.

## Skills

**Cloud Platforms & Infrastructure:** AWS (EC2, RDS, S3, IAM, VPC, Lambda, CloudWatch), Azure (VMs, AKS, Functions, App Services), GCP (monitoring, integrations).

**Containers & Orchestration:** Docker and Kubernetes (EKS, AKS) for microservices architecture. Skilled in container hardening, resource optimization, and auto-scaling strategies for production workloads.

**CI/CD & Automation:** Built and optimized pipelines with Jenkins, GitHub Actions, GitLab CI, and Azure DevOps., Specialized in release orchestration, automated validations, blue-green/canary strategies, and rollback mechanisms.

**Infrastructure as Code (IaC):** Advanced expertise with Terraform, CloudFormation, and Ansible for modular, reusable, and governed infrastructure deployments; Puppet for configuration management.

**Monitoring & Observability:** Hands-on with Prometheus, Grafana, ELK stack, Datadog, and AWS CloudWatch., Strong focus on SLOs, error budgets, and proactive incident response to ensure reliability.

**Programming & Scripting:** Python, Bash, and PowerShell for provisioning, automated smoke tests, pipeline integrations, and reliability tooling.

**Security & Governance:** Applied least-privilege IAM design, secrets management with HashiCorp Vault/KMS, and compliance enforcement through tagging, guardrails, and automated policy checks.

**Leadership & Collaboration:** Experienced in mentoring junior engineers, creating runbooks and playbooks, and collaborating with development and QA teams to drive secure, reliable, and cost-efficient delivery.

## Education

**Iowa State University**  
*Master's, Information Systems*

**August 2023 - August 2025**  
*GPA: 3.6*

**Sathyabama University**  
*Bachelor's, Electronics Engineering*

**July 2015 - May 2019**  
*GPA: 3*

## Professional Experience

**Coforge DPA**  
*DevOps Engineer*

**Bengaluru, KA, India**  
*February 2022 - July 2023*

- Led the design and automation of a large-scale e-commerce microservices platform (payments, orders, catalog) hosted on AWS, ensuring secure, scalable, and resilient infrastructure.
- Reduced infrastructure provisioning time by 70% for enterprise DevOps initiatives by designing and deploying automated cloud environments with Terraform and CloudFormation, driving agility and cost-effectiveness for back-end systems.
- Enabled 10+ daily zero-downtime releases for high-availability enterprise solutions by engineering robust CI/CD pipelines with GitLab, Jenkins, and GitHub Actions, integrating source code management best practices and API-driven automation.
- Cut incident response time by 35% and downtime by 25% in cloud platform operations by enhancing monitoring and alerting with Datadog, Prometheus, and Grafana, prioritizing transparency and rapid technical support for critical systems.

- Automated 50+ operational tasks, saving 500+ hours annually across enterprise DevOps workflows by developing Python and Bash scripts to streamline processes supporting web services, API integrations, and improving prioritization of high-value engineering work.

### **Trigent Software**

**Bengaluru, KA, India**

*Cloud Infrastructure Engineer*

*July 2021 - February 2022*

- Delivered the migration of a multi-tier insurance application (policy creation, claims, customer portal) from on-prem to AWS, ensuring environment parity across dev, test, and prod.
- Reduced deployment times by 50% and increased agility for enterprise solutions by designing and optimizing CI/CD pipelines with Jenkins and GitLab, leveraging infrastructure as code and DevOps best practices.
- Achieved 99.9% uptime for data processing systems by leading cloud migration and integrating legacy back-end platforms into AWS using Terraform for infrastructure as code.
- Saved 50+ hours weekly and improved operational efficiency by automating 30+ cloud infrastructure processes with Python and implementing AWS CloudWatch monitoring for proactive technical support.
- Enhanced system monitoring and response by 35% in an enterprise cloud environment by implementing AWS CloudWatch alerts for API and web services, utilizing critical thinking and prioritization for incident management.

### **Ayya IT Pvt Ltd**

**Hyderabad, AP, India**

*Graduate Trainee*

*May 2019 - July 2021*

- Contributed to the modernization of an enterprise analytics platform, enabling high availability and performance by applying DevOps practices across AWS and Azure.
- Reduced deployment time by 90% by engineering CI/CD pipelines with GitLab, Jenkins, and GitHub Actions to automate source code integration and delivery for enterprise solutions across AWS and Azure, driving agility and operational efficiency.
- Enabled scalable analytics environments and consistent infrastructure across cloud platforms by automating provisioning with Terraform and Ansible, applying infrastructure as code and DevOps principles to support back-end data workloads.
- Maintained 99.9% uptime for enterprise analytics platforms by implementing robust monitoring with Prometheus, Grafana, and ELK stack, and delivering proactive technical support to ensure high availability.
- Improved system agility and microservices performance by containerizing applications with Docker and Kubernetes, integrating APIs and web services for scalable back-end data processing.

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## **Related Projects**

### **E-Commerce Microservices (AWS, Kubernetes)**

- Architected hybrid infrastructure, automated CI/CD with Jenkins + Lambda, and enhanced observability with CloudWatch, Prometheus, and Grafana.

### **Multi-Cloud Automation (AWS, Azure, GCP)**

- Automated provisioning with Terraform/Ansible, sustained HA with CI/CD pipelines, and unified monitoring dashboards across clouds.

### **Cloud Infrastructure Modernization (AWS & Azure)**

- Implemented IaC for cloud migration, strengthened security with IAM/network policies, and accelerated delivery pipelines.

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## **Certifications**

- AWS Cloud Practitioner - May 2025
- AWS Certified DevOps Engineer - Aug 2025