Manideep Chittineni

• Gloucester, UK • +447410900764 • manideep.chittineni@hotmail.com • linkedin.com/in/manideepchittineni
https://github.com/mchittineni

Professional Summary

Cloud, DevOps, and AI Engineer with 6+ years of experience designing, building, securing, and operating scalable cloud-native and hybrid infrastructure across Azure, AWS, and GCP, now extending that foundation into production GenAI and agentic-AI engineering. Specialized in production-ready platform engineering for enterprise-scale and global deployments, with deep hands-on expertise in Infrastructure as Code (advanced, modular Terraform with remote state management), Kubernetes, and YAML-based configuration and pipeline design.

Currently engineer cloud-native infrastructure underpinning a Speckle-based design ecosystem and a Databricks data platform, integrating data engineering workflows and pipelines into the broader ecosystem. Strong command of networking, identity, security, and storage; CI/CD automation with GitHub Actions; and DevSecOps practices including Zero Trust, IAM least-privilege, policy-as-code, secrets management, and GDPR/SOC 2 compliance. Also bring solid SRE and FinOps experience, focused on reliability, observability, and cost optimisation.

Formally trained as an AI engineer through Anthropic and OpenAI certification tracks, with applied skills in building LLM-powered applications, agents, subagents, and agent skills; the Model Context Protocol; and deploying Claude on Amazon Bedrock and Google Cloud Vertex AI. Combine an AI-fluency mindset with deep cloud and platform engineering to ship secure, governed, and cost-aware AI systems on production infrastructure.

AI & GENAI ENGINEERING

- **LLM Application Development:** Building applications with the Claude API and OpenAI APIs, Claude Code, prompt engineering, tool/function calling, structured outputs, evaluation, and RAG patterns
- **Agentic AI:** AI agents, subagents, and agent skills; multi-step agentic workflows and orchestration; designing reliable, tool-using autonomous systems
- **Model Context Protocol (MCP):** MCP foundations and advanced topics; building and integrating MCP servers/clients to connect LLMs with enterprise tools and data
- **LLMOps & Cloud AI Platforms:** Deploying and operating Claude on Amazon Bedrock and Google Cloud Vertex AI; integrating GenAI into cloud-native apps with the same IaC, CI/CD, security, and FinOps discipline used for platform engineering
- **Responsible & Applied AI:** AI capabilities and limitations, AI Fluency frameworks, and driving safe, governed AI adoption across education, nonprofit, and small-business contexts

Skills

- **Programming & Automation:** Python, TypeScript, JavaScript, Node.js, Bash, Flutter, React.js
- **Cloud Platforms:** Amazon Web Services (AWS), Microsoft Azure, Google Cloud Platform (GCP), Oracle Cloud Infrastructure (OCI)
- **Cloud Engineering & Platform Services:** AWS Lambda, API Gateway, SNS/SQS, DynamoDB, CloudWatch, Azure Monitor, Azure Key Vault, Azure Kubernetes Service (AKS), Google Kubernetes Engine (GKE), Cloud Build
- **Containers & Platform Engineering:** Docker, Kubernetes, Helm, Container Orchestration, Platform Operations
- **Infrastructure as Code (IaC):** Terraform, Terragrunt, Pulumi, AWS CloudFormation, ARM Templates, Google Cloud Deployment Manager
- **CI/CD & DevOps Tooling:** GitHub Actions, Jenkins, GitLab CI/CD, AWS CodePipeline, Azure DevOps, Cloud Build
- **Configuration Management & Automation:** Ansible, Chef, Puppet

- **Observability & Monitoring:** Datadog, Dynatrace, Grafana, Prometheus, ELK Stack, AWS CloudWatch, Azure Monitor, Google Cloud Monitoring
- **Security & DevSecOps:** IAM, RBAC/ABAC, Zero Trust Architecture, KMS Encryption, GDPR/SOC2 Compliance, Checkov, tfsec, Policy-as-Code
- **AI & GenAI:** Claude API & Claude Code, OpenAI APIs, AI agents/subagents & agent skills, Model Context Protocol (MCP), Amazon Bedrock, Google Cloud Vertex AI, prompt engineering, RAG
- **Data Platforms:** Databricks (workspaces, clusters, Unity Catalog, jobs/pipelines), Speckle ecosystem integration, Snowflake, PostgreSQL, MySQL, MongoDB
- **Site Reliability Engineering (SRE):** Incident Management, Root Cause Analysis (RCA), Reliability Engineering, High Availability, Disaster Recovery, SLA/SLO Monitoring, Capacity Planning
- **FinOps & Cost Optimization:** Cloud Cost Governance, Reserved Instances, Spot Instances, Rightsizing, Autoscaling, Resource Optimization, Budgeting & Forecasting

Experience

Cloud Engineer Mar 2026 – Present

Infoplus Technologies Limited Borehamwood, UK

- Designed and delivered cloud-native infrastructure across AWS and GCP for a Speckle-based design ecosystem and Databricks data platform, cutting environment provisioning from 3 days to under 2 hours and enabling a production-ready, multi-region global rollout.
- Built a modular Terraform IaC framework (25+ reusable modules) with remote state management spanning AWS and GCP, achieving 100% repeatable deployments across environments and reducing configuration drift by 70%.
- Provisioned and operated managed Kubernetes on GCP hosting Speckle services, sustaining 99.9% service availability while autoscaling policies cut idle compute by 25%.
- Standardised infrastructure and pipeline delivery with reusable YAML configuration frameworks, eliminating 40% of duplicated pipeline config and reducing release errors caused by drift.
- Built and governed Databricks on AWS and GCP (workspaces, cluster policies, Unity Catalog, job orchestration), onboarding data engineering workloads under centralised governance and improving data access auditability across the platform.
- Prototyped and integrated GenAI and agentic-AI capabilities into platform tooling using the Claude API, OpenAI APIs, and MCP, automating routine operational workflows and reducing manual toil by 30%.
- Applied LLMOps practices to deploy and govern models on Amazon Bedrock and Google Cloud Vertex AI, reusing existing IaC, CI/CD, identity, and FinOps controls to ship AI workloads with zero new security findings.
- Partnered with data engineers and platform teams to integrate Speckle and Databricks pipelines, aligning networking and identity to remove cross-team integration blockers and accelerate delivery.
- Designed and operated CI/CD pipelines with GitHub Actions, AWS CodePipeline, and Google Cloud Build, reducing release lead time by 50% and increasing deployment frequency through automated, auditable releases.
- Implemented platform controls across networking, identity, security, and storage on AWS and GCP (VPC, PrivateLink/Private Service Connect, IAM RBAC, Secrets Manager and Secret Manager, KMS, policy-as-code), enforcing least-privilege access and preventative guardrails across all environments.
- Embedded observability with AWS CloudWatch, Google Cloud Monitoring, Prometheus, and Grafana, reducing mean time to detect (MTTD) by 40% and improving platform stability.
- Drove FinOps governance across EKS, GKE, and Databricks compute through autoscaling and rightsizing, lowering monthly cloud spend by 25%.

Senior Cloud & DevOps Engineer Oct 2022 – Dec 2025

University of Exeter Exeter, UK

- Acted as a Senior Cloud Engineer and advisor, providing architectural oversight and hands-on delivery across enterprise-scale hybrid and AWS environments supporting 50,000+ users.
- Architected, built, and operated highly available, fault-tolerant platforms, consistently achieving 99.99% uptime across production environments.

- Designed and governed cloud-native and serverless architectures using Lambda, API Gateway, SNS/SQS, DynamoDB, IAM, and CloudWatch, enabling secure and scalable integrations.
- Designed and maintained multi-account architectures using AWS Organizations and Control Tower, enforcing governance through Service Control Policies (SCPs) and preventative security guardrails.
- Implemented Infrastructure as Code using Terraform, automating 100% of cloud provisioning with modular, reusable patterns.
- Designed and implemented Zero Trust, least-privilege IAM architectures across serverless and containerised workloads, with federated identity (SSO, OIDC, RBAC/ABAC) and conditional access.
- Automated credential lifecycle management using Secrets Manager and KMS, including secure rotation of database credentials and API keys.
- Deployed and managed Security Hub, GuardDuty, Config, and encryption controls, reducing incident response times by 50%; aligned logging, monitoring, and compliance with GDPR and SOC 2 Type II.
- Designed and optimised CI/CD pipelines using GitHub Actions and CodePipeline, reducing release cycles by 40%.
- Built monitoring and alerting with CloudWatch, Datadog, and the ELK stack, reducing MTTD by 35%; performed RCA across distributed systems and acted as senior escalation point for complex incidents.
- Led FinOps initiatives reducing infrastructure spend by 45% through Reserved Instances, Spot Instances, autoscaling, and rightsizing.
- Mentored and coached 5+ engineers, improving operational maturity and adoption of DevOps and secure cloud practices.

DevOps / Platform Engineer Apr 2021 – Sep 2022

Procadence Technologies Limited Brentford, UK

- Designed, operated, and assessed cloud-native and hybrid platforms on Google Cloud, advising on scalable, secure, multi-tenant architectures that supported 15+ development teams.
- Designed, operated, and scaled GKE Kubernetes clusters supporting 200+ microservices, with workload isolation and autoscaling that improved resource utilisation by 30% while maintaining 99.9% uptime.
- Built reusable Terraform IaC modules for IAM and resource governance, standardising policy-as-code and reducing configuration drift and manual provisioning effort by 60%.
- Built CI/CD pipelines with Jenkins and Cloud Build for 15+ teams and implemented keyless CI/CD via Workload Identity Federation, eliminating 100% of long-lived service-account keys and cutting deployment failures.
- Re-architected identity and access management to least-privilege RBAC/ABAC with workload identity, removing all long-lived credentials and shrinking the access attack surface.
- Designed and enforced multi-tenant isolation using Kubernetes namespaces, RBAC, and IAM Conditions, and deployed Zero Trust access via Identity-Aware Proxy (IAP) with zero cross-tenant access incidents.
- Implemented monitoring, logging, autoscaling, and capacity planning, reducing operational waste and over-provisioned spend by 20%.
- Performed root cause analysis on production incidents and drove preventative improvements that reduced recurring incidents quarter over quarter.
- Produced technical documentation, runbooks, and knowledge bases, reducing engineer onboarding time by 50%.

Software Engineer Intern Jun 2020 – Mar 2021

Procadence Technologies Limited Brentford, UK

- Automated Azure infrastructure provisioning using ARM templates for 150+ subscriptions, reducing manual configuration effort by 45% and enforcing naming/tagging consistency.
- Built and enhanced CI/CD pipelines using Azure DevOps with automated testing and secure deployment workflows, reducing manual release effort by 35% for enterprise applications.
- Integrated Azure Key Vault into deployment pipelines and Kubernetes workloads, centralising management of certificates and encryption keys and removing hard-coded secrets from code.
- Administered Microsoft Entra ID RBAC hierarchies and service principals across 150+ subscriptions, standardising access governance at scale.
- Enforced Zero Trust standards via Azure Policy and Management Groups with Conditional Access

mandating MFA and device compliance, raising baseline security coverage across all managed subscriptions.
- Integrated Azure Monitor and Application Insights to surface performance bottlenecks early and validate application health against SLAs.
- Authored 20+ operational runbooks and technical standards, improving onboarding efficiency and platform resilience.

Certifications

Cloud, Infrastructure & Data

- AWS Certified Solutions Architect – Associate
- Google Cloud Platform Associate Cloud Engineer
- Microsoft Azure Fundamentals
- Oracle Cloud Infrastructure Developer Certified Associate
- Oracle Cloud Infrastructure Cloud Operations Certified Associate
- Databricks Fundamentals
- HashiCorp Certified: Terraform Associate

AI & Generative AI

- Microsoft Azure AI Fundamentals
- AWS Certified AI Practitioner
- Databricks Generative AI Fundamentals
- Claude & Claude Code Fundamentals
- Building Applications with the Claude API
- Claude on Amazon Bedrock & Google Cloud Vertex AI
- Model Context Protocol (MCP) – Foundations & Advanced Topics
- AI Capabilities & Limitations
- AI Fluency Frameworks
- AI Agents, Subagents & Agent Skills
- AI Adoption Across Education, Nonprofits, and Small Businesses
- Agents and Workflows by OpenAI
- AI Foundations by OpenAI
- Applied AI Foundations by OpenAI

Education

University of the West of England — Bristol, UK
Master of Science, Major in Information Technology — Nov 2021

VNR Vignana Jyothi Institute of Technology — Hyderabad, India
Bachelor of Technology in Electronics and Instrumentation Engineering — Aug 2015 – May 2019