

PUJA CHOWDHURY

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AZ-400 Certified | Harness Certified CD & CI

Cloud
Platforms

Containers
& Orchestration

Infrastructure
as Code

CI/CD &
GitOps

DevSecOps

AI / MLOps

Observability

Scripting &
Automation

Professional Summary

Cloud-agnostic DevOps professional with **5+ years of experience** orchestrating, automating, and managing applications across multi-cloud environments (Azure & AWS). Proven expertise in building scalable infrastructure, streamlining CI/CD pipelines, and implementing robust DevSecOps practices using tools like Kubernetes, Terraform, GitHub Actions, Harness, and ArgoCD. Proficient in integrating AI/ML capabilities — including Azure OpenAI Service, Azure Machine Learning, and AWS SageMaker — into enterprise platforms. Combines strong observability depth (Datadog, Splunk, Prometheus, Grafana) with a security-first engineering mindset to deliver reliable, compliant, and high-performance cloud platforms that accelerate delivery velocity and operational excellence.

30%

Deployment Speed
Improvement

5+

Years Cloud & DevOps
Experience

3

Enterprise Cloud Roles
(Azure & AWS)

6

Professional
Certifications

20+

Tools & Platforms
Mastered

100%

IaC Coverage at ABS
Wavesight

3

Kubernetes Platforms
(AKS · EKS · ECS)

2

AI/ML Integrations
(Azure OpenAI ·
SageMaker)

4+

CI/CD Platforms (GitHub
· Harness · ArgoCD ·
Jenkins)

Zero

Downtime Blue-Green
Deployments Delivered

Multi

Cloud CI/CD Pipelines
Across Azure & AWS

3

DevSecOps
Frameworks (SAST ·
DAST · CSPM)

Technical Skills

Cloud Platforms

Microsoft Azure · Amazon Web Services (AWS) · VMware

Containers & Orch.

Kubernetes · AKS · EKS · ECS · Docker · AWS Fargate · ACR · ECR · Helm · Istio

IaC & Config Mgmt

Terraform (HCP Cloud) · ARM Templates · Bicep · CloudFormation · Ansible · Chef

CI/CD & GitOps

GitHub Actions · Azure DevOps · Jenkins · Harness CD/CI (NextGen) · ArgoCD · GitOps

DevSecOps

Checkov · tfsec · tflint · SonarQube · Veracode · Nexus IQ · JFrog Xray · Aqua Trivy · OWASP ZAP · Azure Defender · AWS Security Hub

AI / MLOps

Azure OpenAI Service (GPT-4) · Azure Machine Learning · Azure Cognitive Services · AWS SageMaker · Amazon Transcribe · AWS Ground Truth · Databricks

Data Engineering

Azure Data Factory · Azure Synapse Analytics · Azure Databricks · Power BI · Snowflake

Observability

Datadog · Splunk · Prometheus · Grafana · Azure Monitor · Application Insights · CloudWatch · ELK Stack · Log Analytics

Scripting & Languages	Python · Bash · PowerShell · Go · YAML · Groovy · JavaScript · Java · HTML
Databases	MySQL · PostgreSQL · MongoDB · DynamoDB · RDS · Cassandra · Oracle DB 10g
Identity & Security	Azure AD · Azure B2C · AWS IAM · Managed Identities · Azure Key Vault · AWS Secrets Manager · OAuth2 · OIDC
Build & Artifact	Maven · ANT · Gradle · .NET · JFrog Artifactory · Nexus · WebLogic · WebSphere · Tomcat · JBoss
Version Control	Git · GitHub · GitLab · Bitbucket · Azure Repos
Issue Tracking	JIRA · Azure DevOps Boards · Remedy · ADO

Professional Experience

ABS Wavesight <i>DevOps Engineer</i>	<i>Jan 2024 – Present</i> Spring, TX
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Azure Cloud Architecture & Containerization: Architected, provisioned, and operated enterprise Azure platforms with a strong focus on cloud-native and containerized solutions — leveraging AKS, ACR, APIM, App Services, Azure Functions, Azure SQL, Storage Accounts, Virtual Networks, and Private Endpoints to deliver secure, scalable, and highly available systems. Led the containerization strategy for application workloads, designing Docker-based build standards, AKS deployment models, and environment isolation patterns for consistent deployments across dev, QA, staging, and production. Defined and enforced Azure Landing Zone standards covering subscription design, naming conventions, tagging strategies, and governance policies for consistent resource management across all environments.

Infrastructure as Code & Networking: Built modular Terraform IaC enabling standardized, repeatable Azure resource provisioning — eliminating configuration drift and manual intervention across environments. Automated infrastructure provisioning through Terraform-driven CI/CD pipelines, improving deployment speed and reliability by approximately 30%. Designed enterprise-grade networking, security, and identity architecture using Azure AD, Managed Identities, Key Vault, Application Gateway (WAF), Azure Firewall, Private Endpoints, and Azure Monitor with Application Insights and Log Analytics, aligned with the Azure Well-Architected Framework. Contributed to reusable Terraform and ARM template libraries improving governance and delivery speed across multiple Azure subscriptions and projects.

CI/CD Pipeline Engineering & Developer Platform: Designed and implemented multi-stage CI/CD pipelines using GitHub Actions, incorporating environment promotion, approval gates, rollback strategies, and deployment guardrails for compliant enterprise releases. Standardized CI/CD practices at scale by building reusable workflow templates and composite actions enabling consistent pipeline patterns across microservices and monorepo repositories. Designed and delivered an Internal Developer Platform (IDP) using MkDocs, containerized and deployed on Azure, to centralize self-service documentation and improve developer experience. Authored comprehensive infrastructure documentation and operational runbooks covering CI/CD pipelines, deployment models, and recovery procedures to support long-term maintainability.

DevSecOps, Blue-Green & Disaster Recovery: Integrated security and compliance-as-code into every CI/CD pipeline stage — embedding tfsec, tflint, and Checkov to enforce secure cloud configurations before deployment, and integrating SonarQube and Aqua Trivy for SAST and DAST scanning across enterprise-scale applications. Migrated Terraform state management from Azure Blob Storage to Terraform Cloud, enabling secure state locking, remote execution, and cross-team collaboration. Architected Blue-Green deployment strategies using Azure App Service deployment slots with seamless traffic switching and zero-downtime releases, alongside geo-redundant DR architecture with failover validation for full business continuity. Configured Azure AD B2C across all environments for the Advantage project, enforcing secure authentication and authorization aligned with enterprise identity and compliance standards.

AI Integration & Enterprise Governance: Integrated AI-powered chatbot capabilities into an internal enterprise portal using Azure OpenAI (GPT-4 and embeddings) exposed through APIM, enabling secure conversational access to internal knowledge and services. Implemented enterprise AI governance controls including API rate limiting, authentication via Managed Identities, and cost management policies to ensure responsible and auditable AI usage across the organization.

Sage Intacct

SRE / DevOps Engineer

Apr 2022 – Nov 2023

San Jose, CA

Multi-Cloud CI/CD & Infrastructure as Code: Designed and implemented multi-cloud CI/CD pipelines using Jenkins (Groovy) and Maven, enabling automated build, test, and deployment workflows across Azure and AWS environments. Implemented Terraform IaC across both clouds with remote state management, state locking, workspace segregation, and modular design for consistent multi-cloud provisioning. Established Terraform drift detection and remediation workflows to periodically validate deployed infrastructure against declared state, enforcing configuration consistency and detecting unauthorized manual changes.

Azure & AWS Cloud Platform Operations: Provisioned and operated comprehensive Azure services including AKS, VNets, Azure AD with MFA, Key Vault, ACR, Blob Storage, Databricks, Data Factory, Synapse Analytics, Service Bus, Azure Monitor, and Log Analytics. In parallel, managed AWS infrastructure leveraging IAM, EC2, VPC, Security Groups, Lambda, Route53, CloudFormation, and ECS/Kubernetes workloads — implementing identity federation and network isolation patterns for robust hybrid cloud deployment.

GitOps, Kubernetes & Container Delivery: Implemented GitOps practices using ArgoCD (v2.x) alongside Jenkins CI/CD, enabling declarative Kubernetes deployments, automated drift reconciliation, and controlled application promotion across environments. Built and supported Kubernetes-based CI/CD platforms integrating Jenkins, Docker, and Kubernetes for continuous delivery of containerized applications. Established secure container image workflows using ACR with versioned container builds integrated directly into CI/CD pipelines.

DevSecOps & Security Posture: Integrated SAST and DAST security scanning into CI/CD pipelines — piloting SonarQube for static analysis and OWASP ZAP for dynamic runtime vulnerability identification early in the development lifecycle. Collaborated with security and compliance teams to triage findings, remediate vulnerabilities, and establish baseline DevSecOps practices. Conducted infrastructure security reviews and threat modeling across Azure and AWS environments, strengthening overall cloud security posture. Implemented Prometheus metrics collection and Grafana dashboards for Kubernetes cluster health, application performance, and resource utilization visibility.

AI/ML & Data Engineering: Collected, cleansed, and transformed customer interaction data using Azure Databricks, storing curated datasets in Azure Blob Storage to support analytics and ML initiatives. Developed AI and NLP proof-of-concept solutions using Azure Cognitive Services (Text Analytics, LUIS, Speech Services) for sentiment analysis, intent detection, and speech-to-text transcription on customer support data. Built proof-of-concept ML models using Azure Machine Learning including customer churn prediction, evaluating feasibility and business value prior to production adoption.

Humana

Cloud / DevOps Engineer

Aug 2021 – Apr 2022

Louisville, KY

AWS Cloud Infrastructure & Migration: Built and operated enterprise-scale AWS infrastructure using VPC, IAM, EC2, Auto Scaling, ALB/ELB, EBS, S3, RDS, Route 53, CloudFront, Lambda, API Gateway, SQS, SNS, CloudWatch, CloudTrail, and Elastic Beanstalk — enabling secure, highly available application platforms. Planned and executed workload migrations to AWS with migration runbooks and cutover strategies, improving reliability and cost efficiency through right-sizing, scaling policies, and managed service adoption. Implemented IaC for AWS using CloudFormation and Terraform with modular templates, reusable stacks/modules, and environment parameterization for consistent multi-account provisioning. Automated provisioning and configuration management using Ansible, standardizing server configuration and deployment readiness across environments.

Containerization, EKS/ECS & Deployment Strategies: Containerized and deployed production workloads on AWS ECS and EKS — using ECS/Fargate for serverless containers and EKS for Kubernetes-based orchestration enabling elastic scaling. Implemented advanced deployment strategies on ECS/EKS including Blue/Green, Canary, and automated rollback, reducing release risk and minimizing production downtime. Implemented A/B testing using Istio service mesh for controlled traffic splitting between microservice versions, enabling safe feature rollouts without disrupting the user base.

CI/CD Modernization with Harness & DevSecOps: Led CI/CD platform modernization by migrating from Jenkins to Harness NextGen, designing pipelines with reusable stages, multi-environment promotion (Sandbox → Pre-prod → Prod), and policy-driven

release controls. Operationalized Harness at scale by deploying Harness Delegates (INIT_SCRIPT), building standardized versioned templates, and enabling GitOps-style Git-sync for declarative pipeline configuration. Embedded SAST (Checkmarx/SonarQube) and DAST scanning into CI/CD stages enforcing shift-left security and reducing vulnerability escape to production. Hardened AWS security posture using IAM least privilege, Security Groups/NACLs, AWS Secrets Manager with automated rotation, and AWS Security Hub for compliance benchmark tracking and CSPM remediation.

Observability, AI/ML & Cost Optimization: Built enterprise observability using CloudWatch metrics, logs, alarms, and events combined with Prometheus/Grafana for Kubernetes monitoring and Datadog custom dashboards aggregating data from web servers, databases, and logging services for full application and infrastructure visibility. Leveraged Amazon SageMaker to build predictive risk models assessing patient likelihood of chronic conditions — enabling proactive preventive care interventions. Integrated Amazon Transcribe Medical for automated transcription of patient interviews, and utilized AWS Ground Truth to create high-quality ML training datasets, reducing model development cost and time significantly. Implemented cost visibility controls with spend dashboards and optimization opportunities including autoscaling tuning, storage lifecycle policies, and underutilized compute remediation.

Certifications

Microsoft AZ-400

DevOps Engineer Expert

Microsoft

Harness CD & GitOps

Certified Developer

Harness

Harness CI

CI Administrator

Harness

IBM Cloud Computing

Practitioner Certificate

IBM

IBM Enterprise Design

Design Thinking Certified

IBM

SAS Certification

College of Business

SAS

Education

University of Louisville

Master of Science, Business Analytics

College of Business

ICFAI University, India

Bachelor of Technology, Computer Science Engineering

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