ABIN MATHEW

Azure Cloud Engineer | DevOps Engineer | Cloud Support Engineer

Canada | abinmathew004@gmail.com | linkedin.com/in/abinabin | abinmathew.bio

SUMMARY

Azure Cloud and DevOps Engineer, certified as a Microsoft Azure Administrator Associate (AZ-104) and HashiCorp Terraform Associate. Hands-on project experience designing, automating, and operating Azure infrastructure: infrastructure as code with Terraform and ARM templates, CI/CD with Azure DevOps, containers on Docker and Azure Kubernetes Service (AKS), observability with Azure Monitor, and multi-region disaster recovery. Built ten end-to-end Azure projects and completed a React development internship within a delivery team.

CERTIFICATIONS

Microsoft Certified: Azure Administrator Associate (AZ-104), Microsoft | Jul 2025

HashiCorp Certified: Terraform Associate (003), HashiCorp | Aug 2025

Microsoft Certified: Azure Fundamentals (AZ-900), Microsoft | Jan 2025

TECHNICAL SKILLS

Cloud and Compute: Microsoft Azure, Azure Virtual Machines, Azure Kubernetes Service (AKS), Azure App Service, Azure Functions, Azure Container Registry (ACR), Azure Static Web Apps

Infrastructure as Code: Terraform (modules, remote state, workspaces), ARM Templates, Azure Policy

CI/CD and DevOps: Azure DevOps (YAML pipelines, self-hosted agents, approvals), Jenkins, Argo CD (GitOps), Helm, Docker, Kubernetes, Git

Networking: Virtual Networks (VNets), Network Security Groups (NSGs), Load Balancer, Application Gateway, VPN Gateway, ExpressRoute, Traffic Manager

Security and Identity: Microsoft Entra ID, RBAC, Managed Identities, Azure Key Vault, Microsoft Defender for Cloud, Microsoft Sentinel, Azure Firewall, MFA

Monitoring and Cost: Azure Monitor, Log Analytics, Application Insights, KQL, Prometheus, Grafana, Azure Cost Management

Data: Azure SQL Database, Azure Cosmos DB, Azure Data Factory, Azure Cache for Redis, Azure Synapse Analytics, Azure Database for MySQL

Storage, Backup and DR: Blob Storage, Disk Storage, Azure Files, Azure NetApp Files, Azure Backup, Azure Site Recovery, geo-redundant storage (GRS)

Migration: Azure Migrate, Azure Site Recovery, Azure Database Migration Service

Scripting and Languages: PowerShell, Azure CLI, HCL, YAML, KQL, Python

PROJECTS

Multi-Tier Web Application with Auto-Scaling | *Azure App Service, Azure SQL Database, Application Gateway, Azure Monitor*

- Designed and deployed a highly available multi-tier architecture: Application Gateway load balances an App Service web tier, with a private Azure SQL data tier inside a segmented VNet protected by NSGs.
- Configured CPU-based autoscale rules (scale out above 70%, scale in below 30%, 2 to 10 instances) to absorb traffic spikes without manual intervention.
- Set up Azure Monitor metrics and alerts across every tier for real-time issue detection.

Automated Cloud Migration Pipeline | *Azure Migrate, Azure Site Recovery, Azure Monitor*

- Migrated on-premises virtual machines to Azure, using Azure Migrate for discovery and assessment and Azure Site Recovery for continuous replication.
- Planned staged migration waves with background replication to keep cutover windows and downtime to a minimum.
- Validated migrated workloads for performance, security, and availability before decommissioning source servers.

Kubernetes Container Platform with DevOps Integration | *AKS, Docker, Azure Container Registry, Helm, Azure DevOps*

- Built and managed AKS clusters as the deployment target for containerized microservices.
- Automated image builds, pushes to Azure Container Registry, and rollouts to AKS with Azure DevOps pipelines on every merge.
- Implemented Container Insights monitoring, centralized logging, Kubernetes RBAC, network policies, and secret management.

Infrastructure as Code with Terraform and Governance | *Terraform, HCL, Azure Policy, ARM Templates, Git*

- Developed reusable Terraform modules to provision Azure resources consistently across development, staging, and production.
- Stored Terraform state remotely in a locked Azure Storage account and isolated environments with workspaces.
- Enforced tagging, allowed regions, and approved SKUs with Azure Policy to prevent configuration drift and manual one-off changes.

Azure Monitoring and Cost Optimization Platform | *Azure Monitor, Log Analytics, KQL, Application Insights, Azure Cost Management*

- Centralized logs and metrics from all resource types into a single Log Analytics workspace using diagnostic settings.
- Created KQL-based alert rules, action groups, and workbook dashboards for proactive issue detection and resolution.
- Analyzed usage patterns in Azure Cost Management to right-size underused resources.

React Application Deployment on AKS | *React, Docker, NGINX, Helm, AKS, Azure DevOps*

- Containerized a React application with a multi-stage Docker build served by NGINX.
- Deployed to AKS with Helm charts and per-environment values files, driven by Azure DevOps pipelines.
- Configured rolling updates with readiness probes to keep the application available during every release.

.NET CI/CD Pipeline Automation | *Azure DevOps YAML Pipelines, .NET, Self-hosted Agents, App Service*

- Built one Azure DevOps YAML pipeline covering build, unit test, and release stages for .NET applications.
- Passed build artifacts between stages instead of rebuilding, keeping each release consistent.
- Configured self-hosted agents for faster builds and control over the toolchain and network access.

Azure Terraform CI/CD Pipeline | *Terraform, Azure DevOps, Key Vault, App Service, Azure Database for MySQL, Static Web Apps*

- Designed multi-stage Azure DevOps pipelines that validate, plan, and apply Terraform for Azure infrastructure.
- Provisioned Key Vault, App Service, Azure Database for MySQL, and Static Web Apps for each environment.
- Gated Dev, Staging, and Production deployments with manual approvals.

Enterprise Java CI/CD with GitOps and Observability | *AKS, Jenkins, Maven, Azure Container Registry, Argo CD, Prometheus, Grafana*

- Implemented continuous integration with Jenkins for Maven builds, publishing images to Azure Container Registry.
- Delivered GitOps-based deployments to AKS with Argo CD continuously reconciling the cluster against the desired state in Git.
- Integrated Prometheus and Grafana for metrics and dashboards that make every rollout observable.

Multi-Region Disaster Recovery Solution | *Traffic Manager, App Service, Azure SQL Auto-Failover Group, GRS Storage*

- Architected a multi-region Azure solution with Traffic Manager priority routing and health probes for automatic failover.
- Configured geo-redundant App Services, an Azure SQL auto-failover group, and geo-redundant storage across a region pair.
- Performed scheduled disaster recovery tests to validate failover and business continuity.

EXPERIENCE

Web Developer Intern, Lamia Solutions | Ontario, Canada (Remote) | Apr 2024 - Aug 2024

- Developed responsive web application features in React as part of a Humber Polytechnic capstone project.
- Built reusable UI components and integrated front-end logic in collaboration with a development team.
- Delivered the completed capstone application to the company.

EDUCATION

Information Technology Solutions, Humber Polytechnic | Ontario, Canada | Jan 2023 - Aug 2024
Bachelor of Science, Physics, University of Calicut | India | Jun 2017 - Apr 2020