

# Amosh Sapkota

## Azure Cloud DevOps/ Security Specialist / Administrator

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### PROFESSIONAL SUMMARY

#### Azure Cloud Specialist | 11+ Years in IT | 8+ Years in Azure Cloud

Innovative and results-driven Solutions Architect with 11+ years of IT experience, including 8+ years designing, architecting, and implementing Azure Cloud and automation solutions. Expertise spans Azure, AWS, DevOps, CI/CD, Infrastructure as Code (IaC), governance, and cost optimization.

- **Azure Expertise:** Proficient in Azure IaaS/PaaS, including VMs, VM Scale Sets, Load Balancer, Traffic Manager, Azure Functions, App Services, Logic Apps, SQL, Cosmos DB, Azure Monitor, AAD, and more. Strong hands-on experience with ARM, BICEP, Terraform, and PowerShell for automation and deployment.
- **Cloud Migration & Automation:** Extensive experience migrating on-prem resources to Azure using ASR, Azure Backup, and scripting for patching, imaging, and deployments. Skilled in Azure governance tools like Policies, Blueprints, Key Vault, and Azure Resource Graph.
- **DevOps & CI/CD:** Built robust CI/CD pipelines using Azure DevOps, GitHub, Jenkins, Docker, Maven, Copado, and Bamboo. Integrated tools for unit/integration testing (NUnit, JUnit), code quality, and security scanning. Experience with Helm, Ansible, and Azure Update Management for configuration and orchestration.
- **Monitoring & Logging:** Proficient with ELK Stack (Elasticsearch, Logstash, Kibana), Splunk, and Azure Monitor for log analysis, alerting, and troubleshooting.
- **Azure Data & Container Services:** Working knowledge of Azure Data Factory, Databricks, and Kubernetes (AKS). Experience designing microservices patterns, Helm charts, and securing container-based deployments.
- **Leadership & Enablement:** Skilled in conducting workshops and training on Azure best practices. Designed governance frameworks and cost optimization strategies.
- **Soft Skills:** Excellent problem-solving, interpersonal, and time management skills. Able to lead multiple projects and take on responsibilities to meet team goals.

### IT CERTIFICATIONS

Microsoft Certified: Azure Fundamentals | Microsoft Certified: Azure Developer Associate

### TECHNICAL SKILLS

<b>PAAS:</b>	Azure App Service, Azure Functions, Web Jobs, Azure Batch, Azure Logic App, Azure Container Services, Azure Kubernetes Services, Azure App Configuration, API Management
<b>IAAS:</b>	Virtual Machines & VM Scale Set, Azure Bastion Host, Jump Server, Virtual Network Peering, Virtual Private Network, Express Route, Availability Sets, Availability Zones, Virtual Networks, Regions, Traffic Manager, Application Security, Front Door, Load Balancer, Network Security Group, Application Security Groups, Service Bus, Service and Private Endpoints, etc. Azure Storage Account, Blob, Containers, Queue, Table, Access Keys, Shared Access Signatures.
<b>Security:</b>	Azure Key Vault, Disk Encryption, Azure App Insights, Azure Monitor, Azure Log Analytics, Azure Health Service, Azure Network Monitor, Azure Sentinel, Azure Policy, etc.
<b>Database:</b>	Azure SQL Managed Instance, Azure SQL, Azure Data Lake, Cosmos DB, Stream Analytics
<b>DevOps:</b>	GitHub, Jenkins, Azure DevOps, Azure Automation, YAML, CICD Pipelines, Blue Green Deployment, Canary Deployment, Deployment slots, Azure DevOps Artifacts
<b>Identity:</b>	Azure Active Directory, Managed Identity, System Principal, AD B2C, OAuth, RBAC, Azure Access Policies

**Programming:** Python, PowerShell, Bash/Shell, JavaScript, Perl, ASP. Net, VBScript, Ruby, C, PHP, Java/ J2EE.

**Logging & Monitoring:** Nagios, Splunk, Data Dog, Dynatrace, Prometheus, Grafana, AppDynamics

**SDLC:** Waterfall, Agile Methodology

**Operating System:** Windows, Linux

**Tracking Tool:** JIRA, Azure Boards

**Developer tools:** Visual Studio Code, Visual Studio

**Containerization Tool:** Docker, Kubernetes, AKS, ACI, ACS

**Infrastructure As Code (IAC):** ARM Template, BICEP, Terraform, Blueprints

**Configuration Management Tool:** Ansible

**Application/Web Servers:** Apache Tomcat, NGINX, IIS, JBoss4.1, WebSphere, Web Logic

## PROFESSIONAL EXPERIENCE

### Senior Azure Cloud & DevOps Engineer – Avanade, Seattle, Washington January 2024 – Present

**Project Summary:** Led end-to-end Azure cloud implementations involving IaaS, PaaS, and AKS, focusing on infrastructure automation using Terraform, ARM, and DevOps pipelines. Migrated on-prem workloads to Azure, streamlined CI/CD with Azure DevOps, and enhanced observability with Prometheus, Grafana, and Azure Monitor. Delivered scalable, secure, and governed cloud environments aligned with enterprise standards.

- Implemented key Azure services: AAD, Storage Accounts, Azure VMs, SQL DB, Functions, Service Fabric, Service Bus, Blob Storage, and IIS.
- Designed end-to-end Azure solutions across SaaS, PaaS, and IaaS cloud models.
- Migrated on-prem infrastructure to Azure using ARM templates, ASR, and Azure Backups.
- Deployed resources using ARM templates (JSON), PowerShell, and CI pipelines via VSTS.
- Utilized Azure monitoring tools (Log Analytics, Network Watcher, Service Health) and Dynatrace for proactive alerting and diagnostics.
- Leveraged Azure DevOps tools (Repos, Boards, Test Plans) for planning, development, and deployment.
- Managed AKS policies, access controls, and streamlined workflows for Kubernetes governance.
- Built and deployed containerized apps on AKS using Azure DevOps CI/CD pipelines and YAML.
- Created deployment tools, provisioning scripts, and staged environments using Azure DevOps.
- Provisioned Azure infrastructure using Terraform, configured ExpressRoute via BGP, and visualized plans with Terraform graph.
- Captured/restored VM images using Shared Image Gallery and Azure pipelines.
- Configured AKS cluster autoscaling via Terraform and managed pods/replicas efficiently.
- Integrated Terraform, Packer, and Ansible for custom image creation and dependency provisioning.
- Used Jenkins with Maven for automated build/deploy; integrated with JIRA for issue tracking.
- Deployed Prometheus and Grafana for monitoring and visualization in Helm-based AKS deployments.

**Environment:** Azure Active Directory, Azure Storage Accounts, Azure Virtual Machines, Azure SQL Database, Azure Functions, Azure Service Fabric, Azure Service Bus, Azure Blob Storage, IIS, SaaS, PaaS, IaaS, ARM Templates, Azure Site Recovery, Azure Backup, PowerShell, VSTS, Azure Log Analytics, Azure Network Watcher, Azure Service Health, Dynatrace, Azure DevOps (Repos, Boards, Test Plans), Azure Kubernetes Service (AKS), YAML, Terraform, ExpressRoute, BGP, Shared Image Gallery, Packer, Ansible, Jenkins, Maven, JIRA, Prometheus, Grafana, Helm.

### Azure Cloud & DevOps Engineer – Kinder Morgan, Houston, TX Oct 2021 – Dec 2023

**Project Summary:** Designed and implemented end-to-end Azure cloud solutions, migrating IaaS and PaaS workloads, automating deployments with PowerShell and Terraform, and ensuring high availability of databases. Integrated CI/CD pipelines using Azure DevOps and Jenkins for .NET, Java, and Python apps. Enabled secure infrastructure with SSO, MFA, RBAC, and comprehensive monitoring via App Insights and Log Analytics.

- Worked with Azure SQL Database, Data Lake, Data Factory, SQL Data Warehouse, and Analysis Services.
- Configured Azure AD for SSO, integrated Web/Function Apps with VNet, App Gateway, Key Vault, and App Insights.

- Designed architecture and capacity planning for migrating IaaS VMs and PaaS roles to Azure.
- Enabled Azure MFA, created custom templates, and used PowerShell scripting for automation.
- Deployed Azure SQL DB with Sync and failover; managed database performance and availability.
- Used Azure Automation for process automation, update, and configuration management.
- Configured BGP routing to set up ExpressRoute between on-prem and Azure environments.
- Applied Azure RBAC for secure, team-based access control and role segregation.
- Deployed .NET, Java, and Python apps via Azure DevOps CI/CD pipelines using Repos, Test Plans, and App Services.
- Managed builds, releases, and environment deployments using Azure DevOps/VSTS, Visual Studio, AKS, and App Insights.
- Automated Windows patching and created release pipelines with PowerShell and Azure DevOps.
- Built serverless HTTP-triggered Azure Functions with monitoring via App Insights and load testing.
- Monitored systems using Azure Log Analytics and Application Insights for diagnostics and resolution.
- Used Jenkins pipelines and plugins to automate multi-tier deployments to Docker containers.
- Built IaC templates using Terraform, integrating Log Analytics, and managing VMware, Cloud, and Docker infrastructure.

**Environment:** Azure SQL Database, Azure Data Lake, Azure Data Factory, Azure SQL Data Warehouse, Azure Analysis Services, Azure Active Directory, Web Apps, Function Apps, VNet, Application Gateway, Azure Key Vault, Azure App Insights, PowerShell, Azure Automation, BGP, Azure Fabric, ExpressRoute, Azure RBAC, .NET, Java, Python, Azure DevOps, Azure Repos, Azure Test Plans, Azure App Services, Visual Studio, Azure Kubernetes Service (AKS), Azure Functions, Azure Log Analytics, Jenkins, Docker, Terraform, VMware.

#### Azure Cloud & DevOps Engineer – Bank of Montreal, Chicago, Illinois Jul 2019 – Sep 2021

**Project Summary:** Led the migration of on-prem services to Azure, implementing CI/CD pipelines, automation with PowerShell and Ansible, and integrating various Azure services such as Virtual Networks, Storage, and Data Factory. Configured secure data migration, ExpressRoute, and managed infrastructure using Azure DevOps and Terraform. Ensured seamless integration with external systems and optimized performance with monitoring and autoscaling.

- Worked with core Azure services: Compute, SQL Azure, NoSQL, Storage, Networking, AD, Monitoring, Autoscaling, and IAM.
- Used Azure CLI, Virtual Networks, AAD, Storage, and Databases for resource deployment.
- Set up Azure VNet and Application Gateway to enable communication with on-premises via VPN Gateway.
- Migrated on-prem services to Azure using PowerShell and Azure Portal, managing Security Groups for access control.
- Executed secure data migrations using Azure DMS, Data Factory, and third-party tools with minimal downtime.
- Built and managed CI/CD pipelines with Azure DevOps and PowerShell automation for reliable deployments.
- Developed Jenkins, Maven, and Nexus scripts for automated builds and deployments of Java applications.
- Integrated Azure services with external systems through APIs and Azure integration tools.
- Maintained Azure infrastructure and used YAML with Ansible and Jenkins for automation and CI.
- Managed VMs with availability sets, VM scale sets, load balancers, and configured NSGs.
- Supported legacy and modernized app/service deployments for Azure support teams.
- Configured Azure ExpressRoute for secure, private connectivity between on-prem and Azure.
- Orchestrated infrastructure with Ansible for web apps, server setup, and environment management.
- Used JIRA Agile with Scrum/Kanban boards for tracking and managing project workflows.
- Leveraged Azure Automation and scripting to ensure scalability, reliability, and rapid provisioning.

**Environment:** Azure Compute, SQL Azure, NoSQL, Azure Storage, Networking, Azure AD, Azure Monitoring, Autoscaling, IAM, Azure CLI, Virtual Networks, PowerShell, Azure Portal, Azure DMS, Azure Data Factory, Jenkins, Maven, Nexus, YAML, Ansible, Azure DevOps, ExpressRoute, JIRA Agile, NSGs.

#### DevOps Engineer – Publix Supermarkets, Lakeland, FL Apr 2017 – Jun 2019

**Project Summary:** Implemented CI/CD pipelines and infrastructure automation across AWS and Azure to enhance deployment speed and reliability. Enabled secure, scalable cloud operations with container orchestration, serverless workflows, and disaster recovery strategies.

- Designed CI/CD pipelines using AWS CodePipeline, Jenkins, and Terraform to automate testing, security scanning, and deployments.
- Managed IaC with Terraform, CloudFormation, enabling scalable and compliant multi-cloud provisioning across AWS and Azure.
- Hardened cloud security by configuring AWS IAM, Security Groups, KMS, GuardDuty, WAF, and Azure Key Vault and NSGs.
- Deployed containers on AWS ECS/Fargate and EKS and introduced AKS for hybrid container orchestration and microservices scalability.
- Implemented DR and backup strategies using AWS Backup, S3 versioning, RDS snapshots, and Azure Site Recovery for business continuity.
- Automated observability using AWS CloudWatch, X-Ray, Grafana, ELK, Splunk, and Azure Monitor to reduce MTTR by 45%.
- Configured auto-scaling and ALB, and integrated Azure Load Balancer and App Gateway to enhance performance and availability.
- Built security compliance frameworks with AWS Config, Macie, Inspector, and Azure Policy to align with PCI DSS and SOC 2 standards.
- Optimized networking using AWS Transit Gateway, VPC Peering, Direct Connect, and Azure ExpressRoute for secure hybrid cloud connectivity.
- Reduced cloud spend by 30% through AWS Cost Explorer, RI management, Auto Scaling, and Azure Cost Management best practices.
- Developed serverless workflows using AWS Lambda, Step Functions, and Azure Functions to automate tasks and event-driven processes.
- Promoted DevOps maturity, training teams in GitOps, IaC, and automated delivery to improve agility, collaboration, and release velocity.

**Environment:** AWS CodePipeline, Jenkins, GitHub Actions, Terraform, CloudFormation, BICEP, Azure, AWS IAM, KMS, GuardDuty, WAF, Key Vault, NSGs, ECS, Fargate, EKS, AKS, S3, RDS, Azure Site Recovery, CloudWatch, X-Ray, Grafana, ELK, Splunk, Azure Monitor, ALB, Azure Load Balancer, Application Gateway, AWS Config, Macie, Inspector, Azure Policy, Transit Gateway, Direct Connect, ExpressRoute, Cost Explorer, Azure Cost Management, Lambda, Step Functions, Azure Functions, GitOps.

#### Azure DevOps Engineer – Metropolitan Life Insurance, New York, NY Jan 2017 – Mar 2017

**Project Summary:** Modernized legacy applications and migrated to cloud, enhancing scalability and resilience. Automated CI/CD, IaC, and cloud governance for secure, compliant, and cost-efficient deployments. Enabled observability, disaster recovery, and hybrid cloud integration to support enterprise-grade DevOps operations.

- Led application modernization by migrating monolithic apps to microservices on cloud, enhancing scalability, resilience, and maintainability.
- Engineered CI/CD pipelines using Azure DevOps, Jenkins - best practices for seamless deployments and rollbacks.
- Strengthened cloud security by implementing Azure Firewall, DDoS Protection, Key Vault, NSGs, Private Endpoints, and JIT Access for regulatory compliance.
- Developed IaC solutions with ARM Templates and Ansible, reducing infrastructure deployment time by 50%.
- Implemented observability stacks via Azure Monitor, Log Analytics, Prometheus, Grafana, and Dynatrace for real-time insights and alerting.
- Configured hybrid cloud via ExpressRoute, Virtual WAN, and VPN Gateways, ensuring secure and scalable multi-cloud connectivity.
- Designed DR and backup strategies using Azure Site Recovery and Backup Vaults with cross-region replication to reduce RTO/RPO.
- Enhanced serverless architecture by deploying Azure Functions, Event Grid, and Logic Apps for automated, event-driven workflows.
- Reduced cloud costs by 30% using Azure Cost Management and Advisor through resource right-sizing and auto-scaling strategies.

- Enforced governance and compliance with Azure Policy, Defender for Cloud, and Sentinel to meet SOC 2, ISO 27001, and GDPR standards.
- Automated patching & compliance using PowerShell DSC, Azure Automation, and Security Center; mentored Agile teams, improving delivery speed and saving \$40K/year.

**Environment:** Azure Kubernetes Service (AKS), Azure DevOps, Jenkins, GitHub Actions, Terraform, BICEP, ARM Templates, Ansible, Helm, Azure Firewall, Key Vault, Azure Monitor, Prometheus, Grafana, Dynatrace, ExpressRoute, Azure Site Recovery, Azure Functions, Event Grid, Logic Apps, Azure Cost Management, Azure Policy, Defender for Cloud, Sentinel.

### Software Programmer – QuantiTech, Huntsville, AL Jan 2014 – Dec 2016

- Utilized AWS Cloud services for project hosting and integrated continuous delivery pipelines for rapid development.
- Developed RESTful microservices with Java, PostgreSQL, and automated software testing using Junit, Jasmine, and Selenium.
- Collaborated with internal teams and third-party partners to define, design, and deliver customer-driven solutions.
- Streamlined Scrum and Kanban methodologies to standardize processes and accelerate development cycles.
- Designed and tested front-end and back-end solutions, enhancing performance and adding new features to existing systems.

## EDUCATION

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Master's in computer science  
Bachelor's in computer science  
The University of Texas at Arlington, Arlington, Texas