Enumulapally Sumiran

| Cloud & DevOps Engineering | Infrastructure Automation | Site Reliability Engineering (SRE) | High Availability & Resilience |
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Summary

Cloud and DevOps Engineer with 2+ years of experience designing, deploying, and optimizing scalable cloud infrastructures. Proficient in Microsoft Azure, Kubernetes, Terraform, and CI/CD automation, with expertise in cloud security, reliability engineering, and infrastructure as code (IaC). Skilled in performance optimization, cost efficiency, and incident response, ensuring high availability and resilience in cloud environments. Currently pursuing a Master's in Information Technology at UNC, passionate about bridging traditional IT with cloud-native solutions to drive operational excellence and digital transformation.

Technical Skills

CLOUD PLATFORMS & SERVICES
- Microsoft Azure: Virtual Machines, App Services, SQL Databases, Azure Functions, Storage, VNets
- AWS: EC2, S3, RDS, Lambda

CONTAINER ORCHESTRATION & MANAGEMENT
- Containerization: Docker
- Orchestration: Kubernetes, Azure Kubernetes Service (AKS)

INFRASTRUCTURE AS CODE & AUTOMATION
- IaC Tools: Terraform, ARM Templates, Bicep

MONITORING & OBSERVABILITY
- Azure Monitor, Log Analytics, Application Insights

CI/CD & VERSION CONTROL
- Version Control: Git, GitHub
- CI/CD Pipelines: GitHub Actions, Azure DevOps

NETWORKING & SECURITY
- VPN, IPsec Tunnels, Firewalls (Palo Alto),NSG,Routing
- Zero Trust Architecture, RBAC, Entra ID

SCRIPTING & PROGRAMMING
- Scripting: Bash, PowerShell, Python
- Web Development: JavaScript, HTML, C++, C

Professional Experience

Cloud Engineer (TCS Consultant)

Siemens AG   *Feb 2021 - May 2023*
- Expanded Azure infrastructure footprint by 300%, scaling key resources—including VMs, App Services, SQL Servers, optimizing scalability and performance.
- Designed and implemented an IPsec tunnel between on-premises infrastructure and Azure using Palo Alto and Azure VPN Gateway, enabling seamless cross-region connectivity and secure data exchange.
- Led a security remediation campaign, identifying and mitigating infra vulnerabilities and align with the security best practices and compliance standards, significantly strengthening system security.
- Developed a ticketing tool for clients to request resources, reducing cloud resource delivery time from 5 to 2days.

Projects

AI-Driven Threat Detection in Zero Trust Architecture
- Implemented AI-driven threat detection using Microsoft Defender for Cloud and Azure Sentinel.
- Automated real-time alerts and intelligent responses to security threats.
- Applied Zero Trust Architecture based on the NIST cybersecurity framework.
- Integrated RBAC, Privileged Identity Management (PIM), and Entra ID for enhanced access control.

Certificate Authority Emulation
- Developed and deployed a Certificate Authority (CA) server using Python and Flask on AWS.
- Designed a public-key infrastructure (PKI) for secure digital certificate issuance.
- Implemented encryption techniques, hashing algorithms, and private/public key authentication.

Personal Budget Allocation Website
- Built a web-based budget management application using React and JavaScript.
- Developed a MySQL backend to track budget allocation and monthly expenses.
- Created server-side logic using Node.js and Express.js.
- Implemented secure user authentication to protect financial data.

Certifications

- **Microsoft Certified: Azure Fundamentals (AZ-900)**
  Issued by Microsoft

Education

- **Master of Science (MS) in Information Technology**
  University of North Carolina at Charlotte
  Jan 2024 – Dec 2025