# **Zachary Choate**

LinkedIn: https://www.linkedin.com/in/zchoate

GitHub: https://github.com/zchoate

# **Education and Certifications**

Western Governors University - Dec. 2016

Bachelor of Science, Information Technology with emphasis in Network Administration

#### **Microsoft Certified**

Azure Administrator Associate - Dec. 2018 - Dec. 2023 Azure Solutions Architect Expert - Jan. 2021 - Jan. 2024

## **Skills**

- Public Cloud
  - Azure (Design, Build, and Maintain)
    - Backup and Recovery: VM backup, Microsoft Azure Backup Server
    - Compute: Windows, Linux, Azure Virtual Desktop
    - Containers: App Service, Function Apps, Azure Kubernetes Service, Container Registry
    - Data: Azure SQL, Azure PostgreSQL (Standard and Flexible)
    - Data Analysis: Azure Data Factory, Synapse, AzureML
    - Identity: Azure Active Directory, B2C, AADDS, Managed Identity
    - Networking: Virtual networks, Network Security Groups, NAT Gateways, internal and external load balancers, Application Gateway including WAF, IPsec and ExpressRoute connectivity, Private Link and Private Endpoint
    - Security: Key Vault, Defender for Cloud, AAD Privileged Identity Management, AAD Identity Protection
    - Storage: Blob, Table, Files
  - Microsoft 365 Suite (Design, Build, Maintain, and Migrate)
    - Intune including AutoPilot (true zero-touch deployment implementations)
    - Commercial and GCC High clouds
    - Greenfield implementation, migration from on-premise, migration between tenants
- DevOps Tooling
  - GitHub
  - Azure DevOps

- Infrastructure as Code and Configuration Management: ARM Templates, Terraform, Cloud-Init, Ansible
- Scripting: Powershell, BASH, and Python (entry-level)
- Networking
  - Vendors: Fortinet, Aruba, Cisco, Ubiquiti
  - Solutions: IPsec, routing, L2 switching, firewalls, wireless
- Infrastructure
  - Virtualization: vmWare vSphere and vCenter, Hyper-V, and exposure to KVM
  - Windows Server: Active Directory, Group Policy, DHCP, DNS, IIS, SQL Server, DFS
  - Linux: primarily Ubuntu
  - Public DNS management: Cloudflare and Azure DNS
  - Certificate management: cert-manager and other ACME tools
- Containerization and Orchestration
  - Docker and Docker Compose
  - Kubernetes
    - Ingress controllers including Nginx, Istio, Azure Application Gateway
    - Experience with Kubernetes on Azure, AWS, and K3s
  - Creation and optimization of container images
- Architecture
  - Solution architecture review (hybrid and cloud solutions)
  - Common patterns for IoT solutions from an OEM perspective
  - Designing solutions that are cloud-agnostic

# **Experience**

#### **Cloud Architect - IoT Enablement**

IDEX Corporation - July 2021 - current

- Serve as a subject matter expert on Cloud services including Azure, Kubernetes, containerization, and infrastructure as code (IaC)
- Establish standards and best practices around Cloud adoption (developing a Cloud Center of Excellence)
- Advise business units on how to leverage the Cloud and DevOps to accelerate their digital and IoT journey
- Build proof of concepts and MVPs to demonstrate value in adopting certain technologies
- Provide training for cloud adoption, containerization, and DevOps tooling
- Act as an internal developer advocate proactively identifying process and procedural gaps that could slow developer velocity

#### • Projects:

- Designed and implemented hub and spoke network topology in Azure using Terraform. Reduced costs by reducing gateways needed and simplified new spoke deployment leveraging Terragrunt.
- Automated Azure subscription creation process using Powershell
- Built proof of concept IoT data acquisition solution that also provides remote connectivity to low powered devices behind a cellular connection
- Build out of GitHub Enterprise organization designed for organization-wide collaboration in a highly decentralized organization
- Best practices AKS cluster bootstrapping ArgoCD to deploy core services like Istio, ExternalDNS, cert-manager, AAD Pod Identity, Velero, etc.

#### **Cloud Engineer**

Resultant (formerly KSM Consulting) - Sept. 2020 - July 2021

- Leverage DevOps practices to deploy and maintain solutions including infrastructure as code, web applications, and databases
- Serve as a subject matter expert on Azure services and Kubernetes
- Deploy, manage, and advise on infrastructure as code deployments stored in Git repositories with CI/CD to push changes
- Deploy, manage, and advise on application deployments in Kubernetes including building images
- Advise clients on DevOps and Cloud best practices

#### **System Lead**

Resultant (formerly KSM Consulting) - Feb. 2020 - Sept. 2020

- Define and set technology standards and baselines for clients
- Create roadmaps to get clients' environments to meet baselines
- Serve as a senior escalation point
- Mentor and provide feedback to system administrators
- Serve as subject matter expert in Azure services, Intune implementation and management, Powershell scripting, and web hosting especially Wordpress

#### **System Administrator**

Resultant (formerly KSM Consulting) - May 2017 - Feb. 2020

- Designed and implemented Microsoft Intune solutions to replace traditional server infrastructure including group policy and Active Directory
- Built Azure Function periodically checking for risk events in Azure AD and triggering alerts with detailed information
- Design and implement new networks as well as refreshes of existing networks including replacing firewalls, switching, and wireless
- Implement and troubleshoot core infrastructure including hypervisors, storage networks, Azure IaaS, and Windows Servers

### **IT Analyst**

STRADA - Aug. 2016 - May 2017

### **Remote Administration Technician**

ByteCafe Consulting - June 2015 - July 2016

## **Help Desk Specialist**

Kittle's Home Furnishings - Sept. 2014 - June 2015