

Isaac M

M.S – Information Technology
[AWS Certified Developer Associate](#)

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DevOps Engineer – Traive Inc

04/2022 – Present

- Built a secure multi-account AWS environment, moving workloads from a single AWS account to multiple AWS accounts. This reduced security blast radius, increased workload isolation, and saved upwards of 5 hours per week spent fixing failed deploys
- Designed and deployed an org-wide multi-account network architecture complete with AWS IPAM. This enabled central management of network space ensuring cross account connectivity with no IP address collisions as well as detailed IP address use history
- Instituted least privilege cloud infrastructure and account access for all principals. This ensured that both human users and service principals had only the amount of access required to perform their tasks, reducing the risk of identity based cyberattacks
- Built secure Gitlab CI/CD pipelines using Sysbox system containers. This secured these highly-privileged targets with large attack surface from privilege escalation exploits
- Wrote Terraform modules to allow developers easily spin up infrastructure that meets organizational high availability, compliance, and security standards. These prepackaged constructs skyrocketed developer productivity bringing the time to market for microservices and other infrastructure needs from several weeks to a few minutes
- Built a Change Data Capture (CDC) system that pulled in data from customer systems and streamed these to our application using Kafka on AWS MSK. This allowed us to offer our customers seamless onboarding and eliminated an error prone manual process that involved wrangling customer provided csv files
- Improved security posture by spearheading and enforcing the adoption of centralized secret management. This removed the need for manually managed and shared .env files, eliminated a significant security attack vector, and ensured secret auditability by providing a single source of truth for all secrets created and accessed company wide
- Reduced cloud spend by over 30% by enforcing rigorous tagging of resources. This enabled auditing of running resources as well as stopping resources when not in use

Software Engineer – Dow Jones

06/2021 – 04/2022

- Built microservices that used natural language generation to create automated news article on stock performances. This allowed end-users to subscribe to and receive updates on their followed stocks in an easy-to-read narrative
- Built a service that leveraged fine-tuned pre-trained large language models to translate natural language questions into an SQL query. This allowed end-users to query databases using a search engine-like interface
- Built CI/CD pipelines for both traditional microservices and ML services/models using Terraform, Amazon SageMaker Pipelines and AWS SAM to ensure easy deployment

Skills

- Infrastructure-as-Code
- Automation and CI/CD
- Cloud-native Architecture
- Cloud Security Posture

Tools

- Python, Node.js, C#
- Terraform, CDKTF, Packer
- Kubernetes (EKS), Helm, Datadog
- GitHub, GitLab, Spacelift