

Nyle Garcia

Cloud Engineering | DevOps | Cloud Architecture | Platform Engineering

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About Me

Cloud Engineer with a strong foundation in designing and implementing robust infrastructure on the AWS platform. Proven success in driving security and cloud best practices, significantly reducing mean time to deploy, and optimizing cloud costs. I specialize in AWS cloud solutions, Kafka streaming platforms, and Kubernetes container orchestration to deliver efficient software delivery and operational excellence.

Experience

The Options Clearing Corporation

Associate Principal Cloud Engineer | June 2023 - Present

As the technical owner and lead for Kafka at the OCC, I have a proven track record in designing and architecting multi-region, event-driven cloud solutions on AWS, leveraging key technologies such as Kubernetes for container orchestration. My expertise is crucial to the OCC's ongoing cloud migration journey, the "Renaissance" program. The OCC, the world's largest equity derivatives clearing organization and a designated Systemically Important Financial Market Utility (SIFMU), faces unique challenges in this transition. My expertise is instrumental in overcoming these challenges, ensuring the seamless migration of critical systems like Kafka while maintaining the highest levels of security and resilience required for a SIFMU.

I've leveraged Terraform for efficient infrastructure provisioning and Ansible for streamlined configuration management, ensuring seamless deployments across our evolving cloud environment. I've implemented robust CI/CD pipelines with Jenkins and GitHub, specifically optimized for multi-region Kafka implementations, significantly improving our development and release processes. I've also actively contributed to the design of cloud solutions, mainly focusing on Kafka-related architectures, often running on Kubernetes clusters for scalability and fault tolerance. My contributions are vital in driving the OCC towards

becoming the first SIFMU to successfully transition to the cloud, setting a precedent for other financial institutions.

Xsell Technologies

DevOps Engineering Lead | February 2022 – June 2023

As Lead DevOps Engineer at Xsell Technologies, I spearheaded the transformation of our infrastructure from manually deployed EC2 instances to a modern, scalable Kubernetes architecture. I leveraged my extensive cloud expertise (AWS/Azure) and proficiency in technologies like Kubernetes, Terraform, and Ansible to automate infrastructure provisioning and configuration. This shift streamlined deployments and empowered us to implement event-based autoscaling using Kubernetes native tools like KEDA, optimizing resource utilization and cost efficiency.

I championed continuous improvement by establishing best practices in cloud security and architecture. I actively participated in review boards to maintain the highest standards, particularly critical for FinTech and healthcare compliance. I implemented cutting-edge CI/CD pipelines, adhering to strict governance policies and ensuring secure and efficient software delivery.

My deep understanding of Kafka, RabbitMQ, and Snowflake enabled me to architect robust, event-driven architectures for real-time data processing, vital for our AI-powered platform. Additionally, I incorporated the ELK Stack for comprehensive observability, enabling proactive troubleshooting and performance optimization.

Throughout my tenure, I consistently drove innovation, seeking new opportunities to enhance Xsell Technologies' performance and solidify its position as a leader in customer engagement solutions.

DevOps Engineer | June 2021 - February 2022

DevOps Engineer at Xsell Technologies, utilizing extensive cloud infrastructure design and architecture knowledge.

Wynndalco Enterprises LLC.

Lead DevOps Engineer and Manager | March 2019 – June 2021

Spearheaded the design and implementation of a custom database for the company's ERP system, resulting in optimized data management and streamlined operations. Developed and deployed custom APIs and applications to automate key processes like deliveries, inventory management, and warehousing, significantly improving efficiency. Collaborated closely with cross-functional teams to gather business requirements and translate them into actionable technical solutions. Leveraged cloud technologies to build a scalable and secure infrastructure for the ERP system and its associated applications. Ensured the protection of sensitive data by implementing strong security measures in line with industry standards. Provided guidance and mentorship to a team of DevOps engineers, fostering their professional development and technical expertise.

DevOps Engineer | May 2018 – June 2019

Collaborated with the team to enhance web application performance and security. Managed and assigned tasks to a team of over 70 IT technicians, creating daily and weekly schedules for efficient equipment installations. Developed new company processes to meet client SLAs. Designed custom frameworks, processes, and implemented various APIs for new business and project management initiatives. Additionally, created custom scheduling and routing tools for the deployment of Lottery Vending machines and POS terminals across Illinois.

Systems Engineer | March 2017 – May 2018

My primary responsibility is mass enrollment of devices (Chromebooks, laptops, desktops) to domains. I write automation scripts using Python, Shell, and Batch to streamline tasks and enhance efficiency. I develop, deploy, and test imaging tools (Image X, Dell Images, DSCM, SCCM) and images for projects ranging from single units to over 10,000. Additionally, I provide break-fix support and other technical assistance, both in-house and remotely. I meticulously catalog computer inventory in Excel and our proprietary database. I also create and restore network storage backups using a custom Borg-based utility. Furthermore, I deploy core network upgrades, including wireless APs, servers, routers, and switches for clients.

IT Technician | Sep 2016 – March 2017

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Skills

Cloud Platforms: AWS, Azure

Compute: EC2, ECS, EKS

Storage: S3, DynamoDB

Networking: VPC, Route 53, ELB

Security: IAM, Security Groups, KMS

Monitoring & Logging: CloudWatch, CloudTrail

CI/CD: Jenkins, Terraform, GitHub Actions, Harness

Automation: Ansible, Infrastructure as Code (IaC), Terraform OSS, Terraform Enterprise

Containerization: Docker, Podman, Kubernetes, Rancher, K3s, Minikube, Kind, EKS

Scripting: Bash, Python, Shell

Monitoring & Logging: Logstash, Elasticsearch, Kibana, ELK Stack

Messaging & Data: Kafka, Strimzi, MSK, Kafka Connect, Confluent Platform, RabbitMQ, Snowflake

Other: Nginx Ingress, VoIP Systems, G Suite, Linux/Unix Systems Administration, Flask, Git

Education

- Moraine Valley Community College
 - Associate in General Studies