### Contact

+5518041964 (Mobile) andiespirado@gmail.com

www.linkedin.com/in/andrew-espira (LinkedIn)

bio.link/espirado (Personal) espiradev.org/ (Portfolio) www.credly.com/users/andrewespira/badges (Personal)

### Top Skills

argocd
Business Intelligence (BI)
dataop

### Languages

English (Full Professional)

### Certifications

SRE Fundamentals with Google
Intermediate for Istio by Solo.io
GitOps at Scale certificate
ACE Multicloud Network Associate
Course

AWS Certified Solutions Architect – Associate

# **Andrew Espira**

Platform Engineer | Specializing in DevOps and Site Reliability Solutions

New York, New York, United States

### Summary

A seasoned Infrastructure Engineer and DevOps Specialist with a rich background spanning over six years in diverse technological fields, including software development, system engineering, and site reliability. My expertise covers a wide range of technologies such as Python, Java, Golang, Docker, Terraform, Kubernetes, Jenkins, AWS, and GCP, where I specialize in crafting scalable and reliable solutions. Additionally, I am adept at implementing Large Language Models (LLMs), optimizing systems for low-cost hardware, and mastering serverless technologies like AWS Lambda Edge.

I possess significant expertise in container orchestration, particularly with Kubernetes and Docker Swarm, and have a solid track record of building and optimizing containerized platforms. My passion for cloud-native solutions and distributed computing drives my active participation in the open-source community and my constant pursuit of innovative technologies. My analytical mindset and strong problem-solving skills are crucial in enhancing system reliability and ensuring customer satisfaction across various industries.

## Experience

Saint Peter's University
Graduate Student
June 2024 - Present (1 year 3 months)

Sportserve Site Reliability Engineer June 2022 - Present (3 years 3 months)

EcoHealth Alliance Research Software Engineer May 2023 - June 2024 (1 year 2 months) United States Sarami DevOps Tech Lead August 2021 - May 2022 (10 months) Nairobi, Kenya

Developed and implemented software release management strategies for various applications according to Agile processes. Migrated applications from Heroku hosted to AWS. Improved system reliability by deploying applications in AWS. Implemented autoscaling, load balancing, and Route 53. Increased continuous integration using GitHub Actions and Jenkins pipeline on a development pipeline and automated deployment using GitOps operations to Kubernetes.

- Built reliable and secure systems and deployed multiple applications on AWS by taking advantage of services like AWS Amplify, EC2, S3, ELB, Route 53, CloudWatch, and CloudFormation
- Leveraged AWS SDK in Python to interact with various AWS services and reduce configuration errors
- · Improved application performance with microservices
- Enhanced observability and monitored services using APM tools
- Monitored service level indicators and budgets errors to offer customers reliable and available services

ICIPE - International Centre of Insect Physiology and Ecology 2 years 10 months

System Engineer March 2020 - May 2022 (2 years 3 months) Kenya

Built high-performing computing platforms on AWS to improve workload processing and scalability. Reduced hardware and service failure by interacting and consulting with hardware vendors on appropriate technologies to implement on the existing platforms and by using alert and monitoring tools like Prometheus. Reduced analysis time for Big Data and data computations through parallel computing and using tools like Slurm. Reduced the analysis running and deployment of code time through containers for common data pipelines and by provisioning tools like Terraform.

- Offered computer systems, clusters, operating systems, peripherals, and system interfaces expertise
- Monitored system usage and performance levels with Grafana dashboards

- Promoted reusability by developing Genomic data analysis pipelines with containers and automation solutions using common languages
- Maintained 90% uptime with carefully designed disaster recovery solutions and logging using tools like ELK
- Worked with users and other computational professionals to evaluate user requirements, configure, and deploy computational resources
- Identified security vulnerabilities and implemented procedures to ensure the data center met all security requirements by analyzing system and network logs
- Designed and developed system hardening solutions by subjecting the platform to stress testing and producing reliable disaster recovery solution

### Data Engineer

August 2019 - March 2020 (8 months)

kenya

- Identified, designed, and implemented internal process improvements: automating manual processes, optimizing data delivery, re- designing infrastructure for greater scalability.
- Build the infrastructure required for optimal extraction, transformation, and loading of data from a wide variety of data sources using SQL
- Build analytics tools that utilize the data pipeline to provide actionable insights into customer acquisition, operational efficiency and other key business performance metrics.
- Worked with stakeholders including the Executive, Product, Data and Design teams to assist with data-related technical issues and support their data infrastructure needs.
- Worked with data and analytics experts to strive for greater functionality in our data systems. Developed and implemented procedures for effective data management
- Regularly monitored and evaluated field data and data systems that could affect analytical results, assess system performance, and make recommendations for software, hardware, and data storage improvement Implemented and developed data management strategies

## Education

Jomo Kenyatta University of Agriculture and Technology
Bachelor of Science - BS, Computer Technology/Computer Systems
Technology · (2013 - 2018)

Saint Peter's University

Master of Science - MS, Data science · (September 2024)