# Biniyam B. Demisse MLOps/ML Engineer

contact@biniyambelayneh.com

**L** 251939890540

• Addis Ababa, Ethiopia

Portfolio

in linkedin

• medium

**G**ithub

#### **PROFILE**

Experienced ML and MLOps Engineer with a strong background in Machine Learning, Infrastructure Management, and Deployment Pipelines. Proven track record of success in developing, deploying, monitoring, and Optimizing AI-driven applications in cloud environments. Skilled in both AWS and Azure, with a focus on building end-to-end systems for AI applications. Adept at team collaboration and possess excellent communication skills. Looking to leverage expertise in MLOps and ML Engineering to drive innovation and deliver impactful solutions.

## PROFESSIONAL EXPERIENCE

### ML and MLOps Engineer (2 years), Adludio ∂

Sep 2022 - present

- Led the AI and MLOps team, driving infrastructure optimization and scalability while reducing infrastructure costs by 50% through decommissioning unused services and transitioning to serverless options.
- Designed and implemented end-to-end machine learning pipelines for production using MLflow, AWS SageMaker, and other cloud-native tools, ensuring robust model deployment across multiple AI projects.
- Developed the Bid Optimization project, which improved KPI returns by 15%, fine-tuning bidding strategies to maximize ad performance.
- Played a key role in the Lorenzo project, managing MLOps workflows to streamline machine learning processes and add value to campaign analytics.
- Developed a predictive model for campaign performance, utilizing campaign attributes like time of day and day of the week to optimize scheduling for maximum KPI returns.
- Supported the bid inventory recommendation system, enhancing targeting accuracy and efficiency in inventory selection to drive smarter ad spend allocation.
- Participated in the development of an LLM-based brief information collection tool, aiding in efficient and accurate gathering of campaign briefs for ad creation.
- Managed cloud infrastructure for the entire company, implementing cost-saving strategies that halved infrastructure expenses while ensuring secure, scalable operations.
- Built fully automated CI/CD pipelines using Jenkins and AWS CodePipeline, reducing manual intervention and accelerating deployment processes.
- Established a secure cloud infrastructure that passed third-party security audits, applying best practices across AWS services to ensure compliance and data protection.

### **Data analyst (~1 year),** Ethio Telecom ∂

Nov 2021 – Sep 2022

- Developed automated Python and SQL scripts for processing, cleaning, and visualizing large datasets of customer and wireless network data, which continue to be used in operations today.
- Analyzed network and customer data from MSAG and MSAN boxes, using BigQuery for data processing and Google Data Studio for visualizing insights to aid decision-making.
- Developed a predictive maintenance model for network equipment using Random Forest classification, resulting in a 9.5% reduction in downtime within a selected test region.
- Improved data quality through comprehensive cleaning processes, which enhanced the accuracy of network analytics and enabled more effective targeted maintenance strategies.

#### **EDUCATION**

Machine learning engineering, 10 academy ∂

May 2022 - Jul 2022

**Software Engineering,** ALX Africa ℰ

Jul 2021 – Jul 2022

Electronic Communication Engineering,

Sep 2015 - Feb 2021

Addis Ababa Science and Technology University ∂

### **SKILLS**

# Orchestration and containerization

Mlflow, Kubernetes, Docker, Airflow, Github actions, circle ci, Jenkins and others

### ML and DL

pandas, sklearn, pytorch, tensorflow, Spark, Redash, Postgres, Mysql, others...

## Programming

Python, Bash, Javascript, and others

### AWS

ECR, Batch, Sagemaker, ECS, CloudFormation and Ohters.

## **CERTIFICATES**

**AWS Solutions Architect** *⊗* (End to end AWS infrastructure design and implimentation)

**ISC2 Certified in Cybersecurity** *⊗* (System, Network, and Applications security check and insurance)

**Google Data Analytics** *⊗* (Data cleaning, processing, and visualization and proper storage.)

# **PROJECTS**

**Bid Optimization,** Real Time Bidding Optimization project  $\mathscr D$ 

**Rag Pipeline,** Rag pipeline and chatbot for personal documents  $\mathscr{D}$ 

**LLM finetuning,** finetuning llm for amharic  $\mathscr{D}$ 

**sales prediction,** pharmaceuticals sales prediction using different algorithms  $\mathscr{D}$