Matiwos Desalegn Zewudu

mathiwossilvio@gmail.com | 251974619952 | House No. 30, Gofa Camp, Woreda 06, Addis Ababa, Addis Ababa Region, Ethiopia | https://www.linkedin.com/in/matiwos-desalegn/ | 2000-09-11

Profile Summary

Data Engineer @ Kifiya Financial Technology PLC | Data Analyst | Machine Learning(Gen-AI) Engineer | Scalable Data Solutions with Python, FastAPI, JavaScript and AWS | GDSC Alumni.

Work Experience

Software Developer at HST Consulting PLC (2023-12-01 - 2024-09-30)

Location: Addis Ababa, Ethiopia

Responsibilities: Frontend Developer

• Developed HST Payroll SaaS platform using React.js, JavaScript, and modern

frontend frameworks, enhancing usability and performance.

• Collaborated with backend developers to integrate RESTful APIs and ensure seamless

data flow.

Education

Bachelor's Degree in B.Sc. in Electrical and Computer Engineering (Computer Stream)

Institution: Wolaita Sodo University | Dates: 2018-09-01 - 2024-09-30

Location: Wolaita Sodo

Certification/Online Courses in Kifiya AI Mastery Program

Institution: 10 Academy | Dates: 2024-04-01 - 2024-07-31

Location: Online

Skills & Tools

Programming & Languages

Python (Advanced: Pandas, NumPy, Scikit-learn)

SQL (Advanced: Complex queries, optimization, indexing)

Bash (Intermediate: Scripting, automation)

JavaScript (Working knowledge: React.js, Web integration)

HTML/CSS (Working knowledge: Frontend basics)

Data Engineering Core

ETL/ELT Pipeline Design & Implementation

Data Modeling & Schema Design

Database Optimization & Performance Tuning

Data Warehouse Architecture

Real-time Data Processing

Change Data Capture (CDC)

Data Governance & Quality Control

Databases & Storage

PostgreSQL (Advanced: Performance tuning, materialized views, indexing)

AWS S3 (Data lake implementation)

AWS RDS (Database management)

AWS Athena (SQL queries on S3 data)

Data Lakehouse Architecture

ETL/ELT Tools

DBT (Data transformation)

Mage AI (Workflow orchestration)

Apache Kafka (Stream processing)

Apache Spark (Distributed data processing)

Web Scraping & Data Collection

Selenium (Browser automation)

BeautifulSoup (HTML parsing)

HTTPX (Synchronous/asynchronous HTTP)

Scrapy (Web crawling framework)

API Integration (REST, GraphQL)

Rate Limiting & Proxy Management

Ethical Scraping Practices

API Development

FastAPI (High-performance API framework)

RESTful API Design

WebSocket Implementation

API Documentation (Swagger/OpenAPI)

Microservices Architecture

Cloud & DevOps

AWS Services (S3, Lambda, EC2, EKS, RDS, Athena)

Docker (Containerization)

Kubernetes (Container orchestration)

GitHub Actions (CI/CD pipelines)

Infrastructure as Code

Monitoring & Logging

Machine Learning & AI

Feature Engineering

Feast Feature Store (Feature management)

MLflow (ML lifecycle management)

DVC (Version control for ML)

LangChain (LLM application framework)

RAG Architecture (Retrieval-augmented generation)

Vector Databases (Qdrant)

LLM Integration (Groq, OpenAI)

Business Intelligence & Visualization

Power BI (Dashboard creation)

Tableau (Data visualization)

Redash (Query and visualization)

AWS QuickSight (Cloud BI service)

Dashboard Design Principles

KPI Monitoring & Metrics Design

Project Management & Collaboration

Agile Methodologies

Scrum Framework

Team Leadership

Workshop Facilitation

Technical Documentation

Requirements Gathering & Analysis

Industry Knowledge Areas

Financial Services Data Systems

Agricultural Technology

Regulatory Compliance in Data

Signature Achievements

Reduced data processing latency by 30% through optimized ELT pipelines

Decreased complex query execution times by 50% using materialized views

Built end-to-end ML systems from data collection to production deployment

Designed cloud-native data architectures on AWS infrastructure

Developed RAG-based GenAI applications with LLMs and vector databases

Created interactive business dashboards for stakeholder decision support

Languages

English, Amharic, And Afan Oromo

Awards & Certificates

Google Developer Student Clubs Lead – Letter of Commendation from Google (Google Global Services Nigeria L

Description: Received official commendation for leading the Google Developer Student Club at Wolaita Sodo
University during the 2022–2023 academic year. Recognized for organizing developer workshops, collaborating with
local organizations, and leading technology-driven problem-solving initiatives.