Zinabu Melese

Data Scientist | ML Engineer

✉ zinabu.melese.dev@gmail.com | 📱 +31686241137

○ GitHub | in LinkedIn

SUMMARY

Senior Data scientist and ML Engineer with 5+ years of experience developing predictive models using Python, TensorFlow, and PyTorch. Built and containerized data pipelines and machine learning APIs that automated manual data labeling, saving €560K annually for cross-functional teams. Passionate about deploying scalable ML solutions through MLOps practices (Docker, CI/CD). Strong foundation in statistical modeling, feature engineering, and cloud platforms.

WORK EXPERIENCE

AHV International, Netherlands   July 2023 - Present

Data Scientist

- Engineered a custom machine learning API for precise record labeling, yielding €560K in annual savings for an external data team. This innovation accelerated experiment readiness by 80% and minimized manual oversight.
- Designed and deployed an automated reporting pipeline using Python and serverless cloud architecture, slashing processing time from 2 days to under 10 seconds.
- Applied LLMs to translate predictive model outputs and anomaly detection into clear, actionable recommendations, increasing end-user engagement with alerts and decision-support systems.
- Collaborated with cross-functional teams from 5 countries to design and deploy scalable data-driven solutions addressing business challenges.
- Engineered a data-mart to enable data-driven sales strategy sessions. By segmenting customers into Bronze/Silver/Gold/Platinum tiers and flagging churn risks, improved decision accuracy by 30% and increased target-setting meetings by 50%.
- **Tech:** *Python, SQL, FastAPI, AWS Step and Lambda Functions, Bedrock, EC2, RDS, S3, ECR, CodeCommit, Docker, CICD*

in3, Netherlands   May 2022 - June 2023

Machine Learning Engineer

- Led the design and implementation of a scalable ETL pipeline (Python, SQL, AWS) to integrate fragmented data sources into a unified relational database. Standardized schemas and data models enabled a 40% improvement in BI reporting efficiency, reducing ad-hoc request turnaround time from 3 days to 4 hours..
- Architected and productionized a machine learning credit risk model for a Buy Now Pay Later (BNPL) platform, improved credit decisioning accuracy by 22%, reducing non-performing loans by 30% within six months of implementation.
- **Tech:** *Python, SQL, AWS Step and Lambda Functions, CodeCommit, CodeBuild, CodePipeline, CodeDeploy, CloudWatch, ECS, S3, EFS, RDS, Amazon SageMaker, IAM*

Hendrix Genetics and JADS, Netherlands   January 2020 - February 2022

Data Scientist

- Collaborated with product managers, analysts, developers, and other stakeholders to integrate a forecasting model into the inventory management system, resulted in a 20% reduction in stockouts.
- Built XGBoost model to predict stocks with a 10% profit potential within a 10-day window, resulted in data-driven, enhanced investment decision-making.
- Extracted and processed 5000k+ rows of user data monthly using SQL and Python, creating dashboards to track key performance indicators and inform product development decisions.
- **Tech:** *Python, Flask, SQL, HTML, JavaScript, R*

SKILLS

Programming Languages: Python, PySpark, R, SQL

Cloud Platforms & Tools: AWS (S3, EC2, Step and Lambda Functions, CodeCommit, API Getway, CloudWatch, ECR, RDS, SageMaker), Azure, Databricks, GitHub, Docker

Machine Learning & AI: Gen AI, AI Agent, Machine Learning, Deep Learning, Predictive Modeling, Statistical Analysis, Model Deployment, MLOps

Data Engineering & Analytics: ETL Solutions, Data Model Design, Data Pipelines, Financial Analytics, Fraud Detection

DevOps & CI/CD: CI/CD Pipelines, Infrastructure as Code (IaC), Containerization, Monitoring & Logging, Automations

Education

Eindhoven University of Technology (TU/e), Netherlands   January 2020 - February 2022

Engineering Doctorate in Data Science (EngD)

Relevant Coursework: Object Oriented Programming, Databases, Discrete Maths and Statistics, Data Structures and Algorithms, Operating Systems, Machine Learning, Data Analysis, Data Mining, Advance Data Structures and Algorithms, Information Retrieval, Image Processing

Awards and Certificates

- Project Management on Coursera
- Android Developer Fundamentals Nanodegree on Udacity
- Data Engineering on Udemy
- Machine Learning and Deep Learning Specialization on Coursera