

BILISUMA TADESSE

☎ +251-923-471-256 | ✉ bilitade.dev@gmail.com | 🔗 linkedin.com/in/bilitade | 🐙 github.com/bilitade | 🌐 bilitade.github.io

PROFESSIONAL SUMMARY

AI Engineer with 3+ years at Cooperative Bank of Oromia, currently on the AI Foundry team designing and shipping production LLM applications. Hands-on experience building agentic RAG pipelines with LangChain and LangGraph, vector search with Qdrant and Pinecone, and LLM observability with LangSmith. Previously engineered Python automation systems serving 700+ distributed endpoints. Recognized nationally with 2nd place at the 2026 Ethiopian Ministry of Health Digital Health Hackathon for an explainable HIV risk intelligence platform. Open to remote and hybrid opportunities.

TECHNICAL SKILLS

AI and LLM: LangChain, LangGraph, LangSmith, OpenAI API, Claude API, Agentic Workflows, RAG, Prompt Engineering, Tool Use, Vector Search

ML and Data: Scikit-learn, LightGBM, Pandas, Streamlit, HuggingFace

Backend and APIs: FastAPI, Django, Python, REST APIs, PostgreSQL, MySQL, System Design

Vector Databases: Qdrant, Pinecone, Supabase

Workflow Automation: n8n, Flowise

Cloud and DevOps: AWS EC2, Docker, Git, Linux

Frontend: React, TypeScript, JavaScript

PROFESSIONAL EXPERIENCE

AI System Engineer | AI Foundry Team

Cooperative Bank of Oromia

Sep 2025 – Present

Addis Ababa, Ethiopia

- Design and ship production LLM applications using FastAPI, LangChain, LangGraph, and OpenAI API, focusing on agentic RAG workflows and internal knowledge retrieval
- Built RAGWISE: agentic RAG system with semantic and keyword hybrid search via Qdrant, persistent session state in PostgreSQL, and end-to-end LLM tracing with LangSmith; deployed on AWS EC2
- Developed full-stack AI prototypes with React frontends and Python backends; led integration, testing, and deployment for AI Foundry initiatives
- Collaborated with an AI hardware vendor on a local-inference POC to evaluate on-premise LLM feasibility

Software Engineer | Agile Dev Team

Cooperative Bank of Oromia

Jan 2025 – Sep 2025

Addis Ababa, Ethiopia

- Built and validated digital banking prototypes on Temenos Quantum and Tencent Cloud (TCSAS) platforms
- Worked directly with vendor engineering teams on technical integration, feasibility testing, and solution evaluation

Associate Card Banking Officer | Payment Switch Project Team

Cooperative Bank of Oromia

Nov 2023 – Jan 2025

Addis Ababa, Ethiopia

- Built EJSYNC: automated ATM log collection system for 700+ terminals (Python, Django, React); reduced sync failures by 95% and enabled near-real-time EJ availability for dispute resolution
- Built Consolidator App (Python, PySide6): EMV card file processor cutting issue identification from 6 to 8 hours down to minutes across 700+ branches
- Supported Bank Switch, POS network, and Mastercard/Visa integration for the Payment Switch project

Graduate Trainee | Information Systems

Cooperative Bank of Oromia

Oct 2022 – Nov 2023

Addis Ababa, Ethiopia

- Completed rotational program across branch operations, back-office support, and IT infrastructure

FEATURED PROJECTS

AHD Risk Intelligence | Python, Scikit-learn, LightGBM, Streamlit, Pandas, OpenAI API, Azure VM

May 2026

- 2nd Place** at the 2026 Ethiopian Ministry of Health National Data and Digital Health Week Hackathon
- Built an explainable HIV risk prediction dashboard using PHIA cohort data from 11 Sub-Saharan countries; achieved 0.82 ROC-AUC with LOCO cross-validation across Logistic Regression, Random Forest, and LightGBM
- Delivered real-time clinical decision support with feature-driver explainability, population-scale impact modeling, and AI-generated clinical summaries via OpenAI API; deployed on Azure cloud VM

RAGWISE | FastAPI, LangChain, LangGraph, Qdrant, PostgreSQL, React, LangSmith, AWS EC2

Apr 2026

- Production agentic RAG system with hybrid retrieval (semantic search plus sparse keyword via Qdrant) and persistent session memory in PostgreSQL

- FastAPI backend orchestrating LangChain agent workflows; LangSmith for full LLM observability and trace evaluation; deployed on AWS EC2

PyPilot | *FastAPI, LangGraph, OpenAI API, Groq API, TypeScript* Feb 2026

- VS Code extension using a LangGraph ReAct agent for autonomous file read, write, and edit operations with streaming responses and visual diff review before any write
- Supports OpenAI (GPT-4, GPT-4o) and Groq (Llama) models; FastAPI service handles tool orchestration and agent state

EJSYNC | *Python, Django, React, MySQL, Windows Services, Nginx* Oct 2024 – Apr 2025

- Multithreaded Python server managing concurrent log uploads from 700+ ATM terminals; Django and React dashboard for real-time monitoring and dispute analysis
- 95% reduction in sync failures; system deployed for 40+ internal users across reconciliation and dispute teams

CERTIFICATIONS

n8n Course Level 2 – n8n (Jun 2026)

n8n Course Level 1 – n8n (Jun 2026)

Claude Code in Action – Anthropic (May 2026)

Building with the Claude API – Anthropic (May 2026)

AI Security and Risk Management – DataCamp (Mar 2026)

Supervised Learning with scikit-learn – DataCamp (Mar 2026)

Associate AI Engineer for Developers – DataCamp (Feb 2026)

Introduction to LangGraph (Python) – LangChain Academy (Feb 2026)

Introduction to LangChain (Python) – LangChain Academy (Jan 2026)

Agentic AI – DeepLearning.AI (Nov 2025)

Retrieval Augmented Generation (RAG) – DeepLearning.AI (Oct 2025)

Machine Learning Specialization – DeepLearning.AI (Jul 2025)

FastAPI Essentials – CodeSignal (Jul 2025)

Meta Full-Stack Engineer – Meta (Feb 2025)

Google IT Automation with Python – Google (Jun 2024)

EDUCATION

BSc in Computer Science and Engineering

Adama Science and Technology University

Oct 2017 – Jul 2022

CGPA: 3.67 / 4.00 – Major GPA: 3.87 / 4.00