

# MIKIAS GEBRESILASIE GEBRETSADIK

Full-Stack Developer | Machine Learning Practitioner

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## EXPERIENCE

### Full-Stack Developer Custom ERP

#### Custom ERP

2025 - Present Addis Ababa, Ethiopia

- Built secure school ERP using React & ASP.NET
- Implemented role-based access, UI tests, and OWASP-compliant APIs
- Deployed production systems via IIS/Kestrel

### Backend Developer Developer

#### Infra Tech Software

2024 - 2025 Addis Ababa, Ethiopia

- Developed Dockerized Django backend for inventory system
- Supported AWS EC2 deployment, UI/API testing, and validation

## EDUCATION

### BSc in Computer Science

#### Saint Mary's University

01/2021 - 01/2025 Addis Ababa, Ethiopia

GPA

3.98 / 4.0

## PROJECTS

### Pneumonia Detection

Developed a **medical AI system** that classifies chest X-ray images as **Pneumonia or Normal** using a **custom Convolutional Neural Network (CNN)**. Built end-to-end pipelines for **training, evaluation, and deployment**, with a **Flask web app** enabling real-time inference. Designed to be **lightweight, accurate, and scalable** for practical healthcare workflows.

**Tech Stack:** Python, TensorFlow, Keras, CNNs, Flask, Jinja

### University Scheduling System

Built a **high-performance automated scheduling system** using **ASP.NET Razor Pages, jQuery, and Microsoft SQL Server**. Applied a **genetic algorithm** with optimized stored procedures to generate **conflict-free timetables** at scale. Integrated **JasperReports** for dynamic, printable academic reports. Designed for **speed, scalability, and accuracy**, handling **hundreds of courses, instructors, rooms, and constraints** with minimal manual input.

**Tech Stack:** ASP.NET Razor Pages, jQuery, AJAX, MSSQL, Stored Procedures, Genetic Algorithms, **JasperReports**

### AAU Booking System

Redesigned and modernized a **multi-university multimedia booking platform** using **Domain-Driven Design (DDD)** and **Feature-Sliced Design (FSD)**. Built a **high-performance Django REST backend** with **real-time updates via WebSocket and Redis**, paired with a **fast React + TypeScript (Vite) frontend**. The system supports **booking, cluster management, attendance tracking, and resource management**, delivering a **scalable, secure, production-ready solution**.

**Tech Stack:** Django REST Framework, React, TypeScript, PostgreSQL, Redis, WebSocket, DDD, FSD, Vite

## SUMMARY

Full-Stack Developer Machine Learning Engineer High-impact Full-Stack & ML Engineer with 5+ years experience, coding since age 10. Delivers secure, scalable, production-ready systems with strong focus on OWASP, APIs, UI testing, and Agile SDLC.

## LANGUAGES

### English

Proficient



### Amharic

Native



## SKILLS

Python C# JavaScript TypeScript

C++ React Dart Django

### ASP.NET

ADO.net Flutter CNN RNN LSTM

TensorFlow Keras Jupyter notebook

kafka Flask Pygame Selenium

Playwright Cypress Postman

Docker MSSQL PostgreSQL MySQL

SQLite IIS/Kestrel AWS EC2 Asana

Github Git Git Action Jira Trello