#### SILAS OKANLAWON

okanlawonsilas@gmail.com | My Portfolio | Github Profile | Full-Stack Developer |

Data Scientist | AI/ML Engineer

#### PROFESSIONAL SUMMARY

Visionary and execution-focused AI Engineer and Full-Stack Developer with a strong foundation in machine learning, deep learning, and scalable web architecture. Known for designing intelligent systems that bridge AI and user-centric web apps. From deploying LLMs locally to automating business operations, I build production-grade solutions that unlock measurable value across industries.

#### CORE COMPETENCIES

## Web Development

Frontend: React.js, Next.js (v15+), Tailwind CSS, JavaScript (ES6+), HTML5/CSS3

Backend: FastAPI, Flask, Firebase, Supabase, Node.js

Performance: SSR, ISR, Lazy Loading, API Caching, Code Splitting

### **AI/ML Development**

Frameworks: PyTorch, TensorFlow, Keras, scikit-learn

Techniques: CNNs, RNNs, LSTMs, Transformers, YOLO

NLP: spaCy, NLTK, Hugging Face, Prompt Engineering

## **Automation & Tooling**

Automation: Selenium, BeautifulSoup

Databases: PostgreSQL, MongoDB, Firebase Realtime DB

DevOps: Docker, GitHub Actions, Git

DataViz: Matplotlib, Seaborn, Plotly, Dash

### CERTIFICATIONS

Google Data Analytics Professional Certificate

Full Stack Web Development (udemy)

#### PROFESSIONAL EXPERIENCE

**Data Scientist Intern** — SkillBoost Africa (Internship)

Jul 2025 – Present

Assisting in the development of data-driven products to support upskilling and career advancement in Africa.

Performing exploratory data analysis, feature engineering, and predictive modeling across learner performance and engagement datasets.

### **AI Engineer & Full-Stack Developer** — Rehub Developers (Remote)

Jan 2024 – Present

Engineered custom AI pipelines (NLP, CV, Predictive Models) integrated into web platforms.

Architected scalable full-stack apps using Next.js, Flask, and FastAPI.

Ran local LLMs (TinyLlama) for secure, offline inference in sensitive use cases.

Automated data ingestion workflows with APIs and improved accessibility by 30%.

Led DevOps practices: CI/CD, Dockerized deployments, and code reviews.

### Freelance Full-Stack Developer — Remote

2022 – Present

Delivered 15+ production-grade apps across e-commerce, healthtech, and automation.

Integrated AI APIs into client dashboards for real-time analytics and automation.

Built pixel-perfect UIs with SEO-optimized pages for maximum visibility.

#### AI & Automation Consultant — Remote

2023 - 2024

Developed ML/NLP tools and automation systems saving clients 15–20 hours/week.

Built scalable REST APIs with FastAPI, deployed using Docker + GitHub Actions.

Specialized in integrating AI agents into business workflows.

# KEY PROJECTS

#### **AI & Machine Learning Systems**

**ScholarAI** — Privacy-Preserving AI Research Assistant

Tech: Next.js 15, Tesseract.js, Gemini API, Ollama (LLaMA3), PDF2Pic

Built an open-source research assistant that enables secure, private document analysis and research tasks using both local and cloud LLMs.

Supports local model inference via Ollama for privacy-first workflows, while offering fallback to cloud APIs like Gemini Pro.

Designed modular architecture for user-controlled model selection, privacy mode, and offline compatibility.

Frontend built with Tailwind, Framer Motion; backend powered by Next.js API routes.

### **Emotion Detection (CNN-based)**

Integrated into mental health apps for live facial emotion recognition.

### **YOLO Object Detection**

Deployed for real-time scene analysis in smart surveillance.

### **Chatbot with Adaptive Personality (NLP)**

Used sentiment + persona profiling for dynamic response control.

## **Stock Price Forecaster (LSTM)**

Delivered >25% improvement in prediction stability using sequence modeling.

### **Content Generator (Stable Diffusion + Gemini API)**

Built for creators to automate asset creation (text/image pairing).

#### **Automation & Full-Stack Solutions**

#### **Smart Irrigation System**

IoT-based control with moisture sensors and automated triggers, powered by Arduino.

#### **Gym Management Dashboard**

Real-time progress tracking, trainer analytics, and membership management.

#### **E-Commerce Platform**

Built complete solution from inventory management to secure checkout.

# **Court Reservation Bot (Selenium)**

Automated weekly booking of limited court slots with precision.

B. Sc. Computer Science—University of Ibadan (in progress)

Key Works:

Predictive Modeling for E-commerce

NLP Chatbots for Academic Advisory

Automation Apps for Learning Management