

OLUBUKUN SAMUEL

Software Developer | Machine Learning Engineer

+2348083273795 samuelolubukun@gmail.com https://www.linkedin.com/in/samuel-olubukun-50a57a1a9/

FCT Abuja, Nigeria https://github.com/samolubukun

SUMMARY

I am an enthusiastic and dedicated Full Stack Developer and Machine Learning Engineer with a passion for creating innovative and efficient solutions. With a strong foundation in both front-end and back-end development, I have the versatility to tackle a wide range of projects. My expertise spans pure/vanilla PHP, as well as modern web development frameworks like MERN (MongoDB, Express, React, Node.js), Django, Java Spring, and Laravel.

In addition to my full stack development skills, I have a keen interest in data science and artificial intelligence/machine learning, allowing me to integrate data-driven insights into my work. This multidisciplinary approach enhances the value and effectiveness of the solutions I develop, ensuring they are both functional and intelligent.

EDUCATION

12/2021 - 07/2025 Bachelor of Science (B.Sc.) in Computer Science
Bingham University

EXPERIENCE

- 04/2024

Location

IT Intern

Digital Bridge Institute

DBI is an International Centre for Information and Communications Technology training.

 - Provided technical support and troubleshooting Services.
 - Obtained Cisco IT Essentials Certification and CCNA 1: Intro to networks.
 - Data Analytics: Gained proficiency in data analytics techniques, including data cleaning, data visualization, and statistical analysis.
 - Gained expertise in SQL, Python (with Pandas, NumPy, Matplotlib), and Excel for data management, analysis, and visualization.
 - Machine Learning: Studied machine learning concepts such as supervised and unsupervised learning, neural networks, convolutional neural networks (CNN), and regression analysis.
- 09/2024

Location

Quality Assurance Tester

Africanstreams

A platform promoting African entertainment through authentic content and storytelling.

 - Conducted extensive testing on both the admin panel and client/user-facing sides of the Africanstreams platform.
 - Ensured functionality, user-friendliness, and adherence to industry standards across all features.
 - Identified, documented, and tracked software defects, ensuring timely resolutions.
 - Collaborated with developers and stakeholders to improve platform performance and reliability.
 - Helped maintain a seamless user experience by conducting regression testing after updates and bug fixes.

TECH SKILLS

Full Stack Web Development:	PHP	MERN	Django	Java Spring	
UI/UX Design:	Wireframing	Prototyping	User Research	Figma	
Data Analysis:	Python	Excel	SQL	Tableau	Power BI

TECH SKILLS

Machine Learning and Artificial Intelligence

Prompt Engineering

Graphic Design

MOST PROUD OF (PROJECTS)



Fraudulent Image and Video Detection System Using Deep Learning

Designed and implemented a deep learning-based **Fraudulent Image and Video Detection System** with modular architecture for detecting forged and deepfake media. The system consists of **four specialized models** for image forgery detection, deepfake image classification, video forgery detection, and deepfake video classification. The detection process is **fully automated** with **Streamlit UI**, enabling users to upload media for real-time analysis. The system employs **Error Level Analysis (ELA)**, **Convolutional Neural Networks (CNN)**, **ResNet**, **InceptionV3**, and **Gated Recurrent Units (GRU)** to achieve **accurate** detection by leveraging both spatial and temporal features.



Image Forgery Detection

Developed a **CNN-based model** trained on the **CASIA 2 Dataset** to detect and localize image forgeries. The model integrates **Error Level Analysis (ELA)** during preprocessing to highlight compression artifacts that indicate potential tampering. The **ELA-transformed images** are passed through a convolutional neural network, extracting tamper-specific features to distinguish between genuine and manipulated images. This module enables **precise detection** of image alterations, making it a robust solution for identifying digital forgeries.



Developed PARK Auto Dealer Management System

I developed a management system for PARK Auto Dealers as a school project. Using pure PHP and MySQL, I conducted system analysis and design to streamline customer information and sales lead tracking, replacing manual processes. The system aimed to reduce data entry errors, enhance lead tracking by 60%, and improve marketing effectiveness, potentially leading to better resource allocation and increased sales.



Developed a MERN Stack Food Ordering Website with Payment Integration

Created a food ordering platform using MongoDB, Express.js, React.js, and Node.js. Features include user-friendly interfaces, real-time order management, and integrated payment processing.



Deepfake Video Detection

Developed a **deepfake video detection module** trained on the **Deep Fake Detection (DFD) Dataset**. The system utilizes **Multi-task Cascaded Convolutional Networks (MTCNN)** to extract facial regions from video frames, ensuring the analysis focuses on the most relevant areas. Extracted frames are processed using **InceptionV3 for feature extraction**, and the resulting features are passed through a **Gated Recurrent Unit (GRU) model**, which captures **temporal relationships between frames**. By leveraging both **spatial and temporal information**, this module provides highly accurate classification of deepfake videos, distinguishing them from authentic footage.



Deepfake Image Detection

Implemented a **deepfake image classification model** using the **Real vs. Fake Faces Dataset** to distinguish between real and AI-generated images. The training process involves **resizing and normalizing input images**, followed by feature extraction through a **CNN with convolutional and pooling layers**. The final classification is performed using **dense layers**, producing a **binary output with confidence scores**. This module is optimized to detect subtle artifacts in AI-generated faces, enhancing its ability to detect deepfake images effectively.



Developed Restaurant Food Ordering System

Created a PHP based web application featuring a user panel for browsing menus, placing orders, and managing carts, and an admin panel for menu and order management.

This streamlines the ordering process, improves user experience, and provides efficient administrative tools.