### AONDOVER, PASCAL ORYIMAN

# LinkedIn | Portfolio | Website

Mobile: +2347065768073 | Email: aondoverpascaloryiman@gmail.com

### PROFESSIONAL SUMMARY

Versatile AI-ML Software Engineer and Full-Stack Web Developer with 5+ years of experience in designing, building, and deploying scalable, end-to-end applications. Specializing in Python-based backend with FastAPI and Flask, Web and modern JavaScript frontends (React, Vanilla JS), with a proven track record of leading development cycles from concept to production. Possesses a strong foundation in AI/ML, enabling the integration of intelligent features into robust software solutions. A proactive problem-solver and collaborative team player, passionate about building high-performance, user-centric products.

# **TECHNICAL SKILLS**

- Languages: Python, JavaScript, HTML/HTML5, CSS/CSS3, SQL, C#, C++, Java
- Backend Frameworks: FastAPI, Flask, Python
- Frontend Frameworks & Libraries: Vanilla JavaScript (ES6+), React, CustomTkinter/PyQT
- Databases & Storage: PostgreSQL (PostGIS), SQLite, Firebase Cloud Storage, SQL
- DevOps & Tools: Docker, Kubernetes, Git, GitHub, Linux Command Line, Azure
- APIs & Protocols: RESTful APIs, OpenAI, GeminiAI, PayStack API, Paypal API, Stripe API, WebRTC, Websockets, JWT

## **KEY PROJECTS**

### QuantumPay – Full-Stack Global Financial Super-App | GitHub Link | See Live

- Architected and developed a complete, production-grade financial super-app from the ground up, featuring a FastAPI backend, a React web application, and a React Native mobile application.
- Engineered a globally-aware, multi-currency wallet system supporting both fiat currencies and localized payment rails, including M-Pesa (Kenya), Mobile Money (Ghana), and Virtual Bank Accounts (Nigeria).
- Built a resilient universal payment aggregator service that intelligently routes bill payments and payouts through providers like Paystack and Interswitch, incorporating real-time health checks and automatic failover.
- Implemented a comprehensive AI/ML engine for real-time fraud detection using ensemble models and a stateful Identity Verification service for processing BVN, NIN, and facial comparison via third-party APIs.
- Developed a full-featured mobile application with offline-first capabilities (QuantumMesh Pay via BLE), native biometric security, a product-aware POS system for merchants, and a real-time WebSocket-based live support chat.
- Tech Stack: Python, FastAPI, SQLAlchemy, React, React Native, NativeWind, Zustand, Firebase Auth, PostgreSQL, Docker, a suite of Pan-African Payment APIs (Paystack, Interswitch, Monnify).

#### QuantumLeap AI Trader - Full-Stack Custodial Crypto & Forex Trading Platform | GitHub Link | See Live

- Architected a secure, monolithic backend using FastAPI and a dynamic, real-time frontend with React, establishing a full-fledged custodial trading platform with an internal, atomic ledger system for handling user funds.
- Engineered an advanced AI strategy engine featuring event-driven trading bots (Smart Money Concepts, Grid Trading, MA Crossover) that operate on a centralized WebSocket market data stream for high efficiency and low latency.
- Developed a complete, multi-currency financial system supporting deposits, withdrawals, and swaps for both crypto (BTC, ETH) and fiat (USD, NGN). Integrated with production APIs including BitGo for secure crypto custody and Paystack for real-time fiat bank payouts.
- Implemented a robust, state-aware backtesting module to compare and rank strategy performance based on key financial metrics (Sharpe Ratio, Max Drawdown), enabling data-driven decision-making for users.
- Built a comprehensive user management system with Firebase authentication, JWT-based sessions, tiered subscription plans, and a full suite of superuser administrative tools for platform oversight.

 Tech Stack: Python, FastAPI, React, Tailwind CSS, SQLAlchemy, PostgreSQL/SQLite, Docker, WebSockets, CCXT, NLTK, Sckit-lear, Tensorflow, Numpy, Pandas, Firebase, BitGo API, Paystack API.

### IntelliWeb Engine – Full-Stack E-Commerce & Content Platform | GitHub Link

- Architected a monolithic, full-stack web application serving as the complete backend and frontend for a company website, handling user management, content, and sales.
- Integrated the **Paystack API, PayPal API, Stripe API** for secure e-commerce and subscription management and the Firebase Admin SDK for cloud-based file storage and retrieval.
- Built the entire application with **FastAPI**, implementing JWT-based user authentication, a **SQLite** database, and server-side rendering of dynamic HTML templates.
- Tech Stack: Python, FastAPI, Stripe API, Firebase, JWT, SQLite, Server-Side Rendered HTML, CSS, JS.

### IntelliMeet-X – WebRTC Video Conferencing Application | GitHub Link

- Built a feature-rich, browser-based video conferencing platform from the ground up, enabling real-time, multi-user video and audio communication.
- Implemented a robust signaling server using **Python** and **FastAPI** with **Websockets** to manage P2P connections via **WebRTC**.
- Developed core features including screen sharing, chat functionality, and participant management using modern web technologies.
- Tech Stack: Python, FastAPI, WebRTC, Websockets, JavaScript, HTML/CSS.

#### WORK EXPERIENCE

# **Software Engineer**

Slogan Technologies (Self-employed) | Jan 2019 to Present

- Architected and led the development of scalable AI and software projects, including African Deity Kombat, a 3D game built with C#, C++, and the Unity Engine.
- Designed and deployed VanillaJS, ReactJs, advanced Python applications for robotics and cybersecurity, utilizing FastAPI to create high-performance RESTful APIs.
- Engineered complex data processing workflows by integrating Rasterio and Geopandas with PostGIS, automating geospatial data analysis.
- Mentored team members in software development best practices, improving project efficiency by 40%.

#### **Website Designer & Engineer**

Royal Heritage Group | Jan 2023 to Dec 2023

- Developed and maintained user-friendly web interfaces using HTML, CSS, and JavaScript, resulting in a 90% increase in website traffic through improved UX.
- Integrated SQL databases with a PHP backend to optimize data handling and dynamic content delivery, improving data retrieval speeds by 20%.

# **EDUCATION & CERTIFICATIONS**

- M. Eng, Automation & Mechatronics (Ongoing) St Petersburg Electrotechnical University / Sep. 2025 Sep 2027
- **B. Sc Physics (Hons)** Joseph Sarwuan Tarka University (Formerly University of Agriculture) / Jan. 2015 Sep 2019
- Artificial Intelligence & Data Fundamentals IBM [view] | [view]
- Python Development Essentials MTF Institute [view]

### **PUBLICATIONS**

Advancing Theoretical Foundations of Artificial Intelligence through Integrated Intelligent Systems by Scienxt Journal of
 Artificial Intelligence and Machine Learning (SJAML)- Vol 2 | Issue 3 | 2024 | pp 1-32
 [view]