

Oscar Ndugbu | Full-Stack Machine Learning Engineer

Nigeria – Remote-First | Open to Hybrid/Onsite

📞 +234 803 388 5065 • ✉ scardubu@gmail.com • 🌐 scardubu.dev
🐙 [scardubu](https://github.com/scardubu) • in [oscardubu](https://www.linkedin.com/in/oscardubu)

Professional Summary

Full-stack ML engineer with proven expertise shipping production AI systems at scale. Built and deployed SabiScore—serving **8,300+ concurrent users** with **73.7% prediction accuracy**, **99.94% uptime**, and **142ms response times**. Specialized in end-to-end ML lifecycle: data engineering, feature engineering, ensemble modeling, MLOps, scalable backend/frontend development, and cloud infrastructure. Track record delivering measurable ROI through technical excellence and cross-functional collaboration.

Technical Expertise

ML & Data Science: **Algorithms:** XGBoost, LightGBM, Random Forest, Neural Networks, Ensemble Methods ▪ **Frameworks:** TensorFlow, scikit-learn, PyTorch ▪ **MLOps:** Feature Engineering, Model Deployment, A/B Testing, Monitoring

Backend & Data: **Languages:** Python 3.11+, SQL, JavaScript/Node.js ▪ **Frameworks:** FastAPI, SQLAlchemy, RESTful APIs ▪ **Databases:** PostgreSQL, Redis ▪ **Data Engineering:** ETL Pipelines, Data Quality, API Integration

Frontend & UX: Next.js 15, React 18, TypeScript, Tailwind CSS, shadcn/ui, Ant Design, Chart.js, Server Components, Edge Rendering

Infrastructure: **Cloud:** AWS, GCP, Vercel ▪ **DevOps:** Docker, Kubernetes, CI/CD (GitHub Actions), Turborepo ▪ **Monitoring:** Prometheus, Grafana, Sentry, Playwright, Pytest

Blockchain & Web3: Web3.py, ethers.js, Multi-chain (Ethereum, Polygon, BSC), Zero-Knowledge Proofs (Circom), Smart Contracts

Professional Experience

SabiScore - AI Sports Prediction Platform

Remote

Founder & Lead ML Engineer

Jan 2023–Present

End-to-end ownership of production AI platform from architecture to deployment

- **ML Engineering:** Engineered **220+ predictive features** (rolling windows, momentum indicators, H2H statistics) overcoming sparse sports data and class imbalance. Built weighted ensemble (XGBoost/LightGBM/Random Forest) achieving **73.7% accuracy**, **84.9% precision** on high-confidence predictions, **+18.4% ROI**, and **0.184 Brier score**
- **Backend Architecture:** Designed scalable FastAPI microservices with PostgreSQL + Redis caching, optimized queries and indexes achieving **142ms avg response times** and serving **8,300+ concurrent users** at **99.94% uptime**
- **Frontend Development:** Built modern Next.js 15 UI with edge rendering, real-time WebSocket streaming, interactive Chart.js visualizations, and responsive design delivering **sub-150ms page loads**
- **MLOps & Infrastructure:** Implemented automated data ingestion from multiple APIs (ESPN, Opta, Betfair), established observability stack (Prometheus/Grafana/Sentry), configured Turborepo monorepo, and CI/CD pipelines via GitHub Actions
- **Business Impact:** Platform demonstrating clear value proposition with quantifiable prediction accuracy and user engagement metrics
- *Production Link:* sabiscore.vercel.app | *GitHub:* [Scardubu/sabiscore](https://github.com/Scardubu/sabiscore)

Hashablanca - Enterprise Blockchain Platform

Remote

Lead Full-Stack Engineer

Jan–Jun 2024

Led technical architecture for privacy-focused multi-chain token distribution system

- **System Design:** Architected enterprise platform supporting large-scale token distributions across multiple blockchains with privacy-preserving mechanisms and regulatory compliance
- **File Handling Innovation:** Implemented RFC 8949 CBOR streaming for **4GB+ file uploads** with chunked/resumable transfers and memory-efficient processing, solving critical scalability bottleneck
- **Multi-Chain Infrastructure:** Built unified interface supporting Ethereum, Polygon, BSC, and StarkNet with EIP-1559 gas optimization, intelligent transaction batching, and cross-network cost forecasting
- **Security & Privacy:** Integrated **Zero-Knowledge Proofs (Circom)** for transaction privacy, AES-GCM-256 encryption, CoinJoin unlinkability, GDPR-compliant PII detection, and RBAC achieving **90%+ test coverage**
- **Real-Time UI:** Developed React 18 dashboard with WebSocket live tracking, WCAG-compliant accessibility using Ant Design + shadcn/ui
- *GitHub:* [Scardubu/hashablanca](#)

Independent Practice

Remote

AI Consultant & LLM Integration Specialist

Jan 2024–Present

- **ML Debugging Automation:** Reduced failure analysis time **60%** (10hr → 4hr) for 5+ clients by building automated debugging system combining traditional ML diagnostics with LLM-powered root cause analysis
- **Explainable AI:** Integrated GPT-4/Ollama/LangChain to generate natural-language explanations of complex model decisions, enabling non-technical stakeholders to understand and trust AI recommendations
- **Strategic Advisory:** Consulted on AI strategy including LLM vs. traditional ML trade-offs, cost-benefit analysis, scalability planning, and ROI-focused implementation roadmaps

Sports Analytics & Data Engineering

Remote

Independent ML Researcher

Jan 2021–Dec 2023

- Built automated data collection pipeline gathering **100K+ data points** from 5+ APIs and custom scrapers with rate-limiting, error handling, and data quality validation
- Engineered **200+ domain-specific features:** rolling statistics, form trajectories, head-to-head metrics, fatigue modeling, home/away advantages, and momentum indicators for advanced predictive models

Universal Basic Education Commission

Anambra, Nigeria

Senior Planning Officer

2014–Present

- Built data dashboards and analytics improving stakeholder decision-making efficiency **40%**
- Led cross-functional teams of **15+ members** on statewide education infrastructure projects
- *Part-time since 2021, concurrent with ML engineering projects*

Featured Projects & Open-Source

SabiScore: Production football intelligence platform with real-time ML predictions, comprehensive match analytics, and modern web interface. Demonstrates end-to-end ML system design from data ingestion to deployment. [GitHub Repository](#)

Hashablanca: Privacy-focused blockchain token distributor with Zero-Knowledge Proofs, multi-chain support (Ethereum/Polygon) and enterprise-grade security features. [GitHub Repository](#)

Open Source: Active contributor to XGBoost and scikit-learn ecosystems: bug fixes, performance optimizations, documentation improvements, and community support in GitHub discussions

Education

Federal University of Technology Owerri

Owerri, Nigeria

Bachelor of Technology (B.Tech) in Technology

2006–2011

Professional Development & Certifications

1,000+ hours structured learning | 50+ production projects | 2021–Present

ML/AI: Kaggle: Machine Learning, Feature Engineering, Python, Pandas, Data Visualization ▪ **Google:** ML Crash Course with TensorFlow ▪ **Coursera:** ML Specialization (Andrew Ng – Stanford/DeepLearning.AI)

Self-Study: 20+ advanced courses in Deep Learning, MLOps, Full-Stack Development (Coursera, Udacity, Fast.ai)

In Progress: AWS Solutions Architect Associate, CKA (Certified Kubernetes Administrator), Rust Programming, Advanced RAG Systems with LangChain

Why Work With Me

- **End-to-End ML Ownership:** Proven ability to ship complete production systems—from data pipelines and model development to API design, frontend implementation, deployment, and monitoring. No handoffs needed.

- **Production-Scale Experience:** Successfully managed 8,300+ concurrent users at 99.94% uptime. Deep understanding of real-world ML challenges: data quality, model drift, latency optimization, scalability, and reliability.
- **Business-Technical Bridge:** Excel at translating complex ML concepts into clear insights for technical teams, executives, and stakeholders. Focus on measurable ROI and business value, not just technical metrics.
- **Rapid Execution:** Self-directed builder who ships fast. Comfortable with ambiguity and adept at making pragmatic engineering decisions that balance speed, quality, and maintainability.
- **Cross-Functional Collaboration:** Experience working across product, engineering, and business teams. Strong communication and documentation skills essential for ML engineering leadership roles.

Seeking: Full-Stack ML Engineer | Senior ML Engineer | AI Engineer | MLOps Engineer