

# PRINCE MAWUKO DZORKPE

## **SOFTWARE ENGINEER | AI/ML, BACKEND & DATA SYSTEMS | REMOTE PRODUCT DELIVERY**

Takoradi, Ghana (UTC+0) | +233 246 870 679 | princegh100@outlook.com

linkedin.com/in/prince-mawuko-dzorpke-274500376 | github.com/PM-Devs |  
koralai.online

*Remote worldwide / Full overlap with European hours / US Eastern overlap  
available / Open to contract, full-time and relocation*

## **PROFESSIONAL PROFILE**

Degree-qualified Software Engineer with 6+ years of continuous technology experience across AI/ML, backend engineering, data systems, full-stack development, cloud infrastructure, cybersecurity and IT support. I have delivered production systems for teams and clients in Ghana, Canada and Equatorial Guinea, including AI products, marketplaces, mobile applications, telecom integrations, data pipelines and business systems. Strongest in Python, TypeScript/JavaScript, Node.js, FastAPI, SQL, PostgreSQL, React, Docker and AI-native engineering. Comfortable owning work from an unclear business problem through architecture, implementation, testing, deployment, documentation and production support.

## **GLOBAL PROFILE HIGHLIGHTS**

- International remote delivery across Ghana, Canada and Equatorial Guinea, with direct client communication, asynchronous updates, code review, documentation and independent ownership.
- Built and deployed an AT Ghana-integrated transaction platform that processed more than 100,000 secure transactions with no recorded security incident.
- Built and operated Node.js/MongoDB commerce systems that handled more than USD 500,000 in transactions at 99.7% uptime.
- Contributed to a product ecosystem that released four iOS and four Android applications, backed by FastAPI, PostgreSQL, Redis and mobile integrations.

- Built AI/ML systems spanning RAG, LLM APIs, agentic workflows, market forecasting, data acquisition, model evaluation and environmental intelligence.

## TECHNICAL SKILLS

**Languages:** Python, TypeScript, JavaScript, SQL, PHP, Go, Java, C++, C#, VB.NET, Dart

**Backend and distributed systems:** FastAPI, Django, Node.js, Express, REST APIs, GraphQL, gRPC, microservices, distributed systems, Kafka, Redis, authentication, caching, background processing and third-party integrations

**Data engineering and analytics:** ETL/ELT, Pandas, NumPy, Matplotlib, Seaborn, PostgreSQL, MySQL, MongoDB, SQLite, schema design, query optimisation, data validation, lineage, normalization, deduplication and exploratory analysis

**AI/ML and agent systems:** RAG, LLM APIs, AI agents, agentic workflows, embeddings, vector search, OpenAI, Claude, Gemini, OpenRouter, model evaluation, NLP, Scikit-learn, TensorFlow, CatBoost, LSTM, HMM, BERT/GPT fine-tuning, LoRA, quantization and distillation

**Frontend and mobile:** React, Redux, React Native, Flutter, HTML5, CSS3, Tailwind CSS, Bootstrap, jQuery, responsive UI and Figma

**Cloud, DevOps and infrastructure:** Docker, Kubernetes, Linux, VPS administration, AWS, Azure, Vercel, Jenkins, CI/CD, Git, GitHub, monitoring, backups and production debugging

**Security and IT operations:** Secure development, encryption, access controls, vulnerability assessment, Kali Linux, Wireshark, Shodan, workstation/network support, incident documentation and backup/recovery

**Remote delivery and productivity:** Slack, Jira, Trello, Asana, ClickUp, Notion, Microsoft 365, Google Workspace, Agile/Kanban, technical documentation, stakeholder communication and asynchronous delivery

## PROFESSIONAL EXPERIENCE

Independent Software Engineer / Technical Consultant | International and Ghanaian Client Work

Remote / Ghana & international | 2023 - Present

- Mpontuo Health Technologies (Jun 2025 - Jun 2026): delivered backend architecture, APIs, PostgreSQL schemas, Redis caching and VPS deployment for the Ahoto healthcare and logistics ecosystem; supported four iOS and four Android releases and worked directly with product stakeholders through production issues.

- Koral AI (2025 - Present): built an AI interview-intelligence and career-readiness platform as a freelance engineer using FastAPI, React, TypeScript, MongoDB, RAG and multiple model providers; own architecture, retrieval quality, model integration, deployment and ongoing product changes.
- AfromartPlus / AFROMART, Canada (Jan - Apr 2026): designed service architecture and data models for a diaspora marketplace covering merchants, inventory, orders, payments, delivery and fulfilment; defined API, integrity and integration standards for a fully remote team.
- Bufalo AI for Mpontuo Sales & Marketing (Oct 2025 - Mar 2026): translated lead-research and competitor-analysis workflows into an AI-assisted product with FastAPI, SQL, React and LLM extraction; built a seven-stage pipeline with validation, lineage, retries, quarantine and targeted reprocessing.
- Ebeye, Equatorial Guinea (Oct - Nov 2025): built and deployed a responsive website and CMS interface remotely, replacing a developer-dependent content workflow with direct publishing for non-technical staff.
- DOSH Ghana / AT Ghana integration (2023): built Node.js services, access controls, transaction workflows and VPS deployment for an airtime-and-data distribution platform that processed more than 100,000 secure transactions with no recorded security incident.
- Additional client delivery includes GHBC/BotenLtd CMS systems, QHSE business software, web platforms and backend integrations.

Senior AI Developer / Lead Backend Developer | SolaraFx AI

Fully remote | Mar 2024 - Dec 2024

- Built distributed Python services, model APIs and financial-data pipelines for a commodity-trading and market-intelligence platform.
- Took LSTM and Hidden Markov Model workflows through data preparation, training, validation, deployment, monitoring and production debugging.
- Investigated failures across data, models and backend services, then changed implementation and architecture where reliability or performance broke under real operating conditions.

Co-founder / Backend and AI Developer | BootCode I.T Hub

Ghana / remote collaboration | Jan 2023 - Dec 2024

- Delivered custom software for startups, businesses and innovation programmes, covering APIs, databases, web systems and AI features.
- Built Afia AI using NLP, RAG and LLM integrations, and developed predictive analytics for venture-capital assessment using Python, Pandas, Scikit-learn and SQL.

- Supported architecture, debugging, deployment and technical mentoring across client and community projects.

IT Support Specialist - National Service | Ghana Armed Forces - Ghana Navy  
Naval Base, Takoradi, Ghana | Oct 2024 - Sep 2025

- Supported users directly across workstations, Windows systems, printers, networks, accounts and business applications in a security-controlled environment.
- Diagnosed problems with incomplete information and limited access; maintained backups, access controls, antivirus, equipment records and incident documentation under military procedure.

IT Support | Duapa Workspace

Ghana | 2023

- Provided frontline technical support, resolved hardware and software incidents, carried out routine maintenance and kept shared systems usable for daily business operations.
- Worked directly with users who described problems in business terms, traced the technical cause and applied practical fixes or escalation steps.

Backend Developer | Campus Guide System - Takoradi Technical University

Ghana | Feb 2023 - Dec 2023

- Built application logic, REST APIs and integration layers for a microservices campus-navigation platform; optimised database access and wrote API documentation for maintenance and handover.

System Administrator (Part-Time) | Glory Life Ministry International

Ghana | Jan 2019 - Dec 2023

- Managed Linux and Windows systems, user access, networks, backups and production services across several years of day-to-day operations.
- Automated recurring administration and monitoring work in Python and implemented backup and recovery controls.

Independent Cybersecurity Consultant | Self-Employed

Ghana | Jan 2019 - Dec 2021

- Performed authorised security assessments using Kali Linux, Wireshark, Shodan and custom Python tooling; documented vulnerabilities and practical remediation steps for clients.

## SELECTED SYSTEMS, RESEARCH AND PROJECTS

- CoNET (Colony Network): ongoing research into a capability-discovery network for autonomous agents. The design explores dynamic agent discovery, task delegation, trust, identity, permissions, routing, failure handling, MCP compatibility, RAG memory, embeddings, vector search and gRPC.
- EMITAL environmental intelligence: led a multidisciplinary team that used Python, CatBoost and IoT sensor data for live environmental classification and predictive analysis; recognised at the Ghana Statistical Service Data Hackathon.
- Kejetia.shop: built an e-commerce platform with a RAG shopping assistant grounded in live catalogue data for context-aware product discovery.
- Biometric fingerprint systems: built ESP32 and NodeMCU solutions with C++ firmware, encrypted transmission, PHP/MySQL administration and live access-control deployment to more than one organisation.
- Blankease / Blakktrading: built and operated Node.js/MongoDB commerce platforms covering transactions, payments, inventory and customer workflows; more than USD 500,000 in transactions at 99.7% uptime.
- School Management System - Little Oak Preparatory: built a Python/Tkinter/SQLite desktop application for records, grading, fees, parent communication and role-based administration.

## EDUCATION

Bachelor of Technology (BTech), Software Engineering | Takoradi Technical University

Takoradi, Ghana | Completed Jun 2026

- Completed alongside professional engineering work, national service and client delivery.

Higher National Diploma (HND), Information Technology | Takoradi Technical University

Takoradi, Ghana | Completed 2024

- First class, CGPA 4.136 / 5.00.

## CERTIFICATIONS AND PROFESSIONAL DEVELOPMENT

Advanced Python Programming | Docker and Container Technologies | Serverless and Cloud Computing | Advanced JavaScript and Node.js | Ethical Hacking |

Project Management | UX/UI Design | ChatGPT for Developers and Coders

**Current development:** Google Cloud Professional Data Engineer learning path; continuing study in modern data engineering, distributed AI systems and AI-assisted cyber defence.

## AWARDS, LEADERSHIP AND COMMUNITY

- COSA Agile Data Hackathon Ghana 2025 - winning team; AI precision-agriculture platform using machine learning, drone imagery, geospatial analytics and remote sensing.
- Ghana Statistical Service Data Hackathon 2024 - led the EMITAL team; regional second place.
- Kosmos Innovation Center AgriTech Classic Challenge 2023 - IT Lead and Public Relations Officer.
- Takoradi Annual Startup Summit 2022 - first place as team lead.
- Programming Lead, Google Developer Student Club - coordinated practical software projects and mentored student teams.
- React Native and Cybersecurity Tutor, Coding Ladies Academy Ghana (2025) - delivered remote technical instruction, project review and secure-coding guidance.

## REMOTE WORK AND AVAILABILITY

Based in Ghana (UTC+0) with demonstrated remote delivery for clients and teams in Canada, Equatorial Guinea and Ghana. Comfortable working independently, communicating through written updates and shared documentation, reviewing code asynchronously, and collaborating across time zones. Available for international remote full-time roles, contractor engagements and relocation opportunities with visa sponsorship.