# ALFRED MULINGE MAWEU

Data Analyst | AI & Innovation Consultant | Full-Stack Developer

📞 +254700861129          ✉ binfred.ke@gmail.com          📍 Nairobi, Kenya

🌐 Portfolio          in LinkedIn

## 👤 PROFESSIONAL SUMMARY

Innovative data analyst, AI consultant, and full-stack developer with extensive experience building enterprise-grade applications and delivering data-driven strategic insights. Specialized in productivity analytics, AI-powered platforms, blockchain solutions, and quantitative research across fintech, blockchain, and development sectors. Proven track record architecting scalable systems, conducting advanced statistical modeling, and translating complex data into actionable business intelligence. Combines technical excellence in React, TypeScript, Python, and R with strategic thinking to drive measurable business impact.

## 🎓 EDUCATION

**Bachelor of Science in Statistics and Data Science**          **March 2024 – Sep 2025**
*Strathmore University (Paused due to financial constraints)*

- Specialized in predictive analytics and econometric modeling with advanced coursework in data analytics, statistical computing, machine learning, and business intelligence
- Produced top-ranked analysis of National Treasury food prices dataset, outperforming all first- and second-year cohorts
- Entrusted by Institution's Head of Data Science with leading Islamic banking customer acquisition research
- Currently stabilizing financially before resuming studies – maintaining cutting-edge skills through professional projects and self-directed learning

**Kenya Certificate of Secondary Education (KCSE)**          **2020 – 2023**
*Nairobi School*

- **Mathematics Club Chairman**: Led mathematics competitions and mentoring programs
- **Deputy Chairman of Peer Counselling**: Received Harvard-standard training, providing mental health support
- Achieved **7th place nationwide** in 2023 Mathematics Olympiad and **4th place** in Brookside Contest
- Selected to represent Kenya in **East African Mathematics Olympiad** (2024)

## 💼 PROFESSIONAL EXPERIENCE

**Data, AI & Innovation Consultant (Part-time)**        April 2025 – Present
*ProDG Studios*

- Architected **VGG Holdings Portal**, an enterprise-grade multi-company management platform featuring AI-powered assistant, role-based access control, real-time analytics dashboards, API integration hub, and workflow automation using React, TypeScript, and Supabase
- Conducted comprehensive Microsoft 365 productivity analysis for enterprise client, analyzing meeting attendance patterns, email metrics, and departmental performance – delivered actionable insights that identified productivity bottlenecks and collaboration opportunities
- Developing advanced productivity analytics tool building on Microsoft analysis framework for ongoing client optimization
- Led strategic proposal drafting for high-value clients including Safaricom telemedicine initiatives across Helium Health ecosystem, collaborating directly with C-suite executives in cross-company strategy meetings
- Authored comprehensive litepaper for stablecoin client including tokenomics design, market positioning analysis, and competitive landscape assessment
- Designed gold-backed stablecoin framework with complete white paper and asset structure documentation
- Prepared multiple remittance framework proposals and strategic documentation for blockchain clients
- Delivered data-driven market research and feasibility studies supporting client strategic decision-making

**Full-Stack Developer & Data Consultant (Part-time)**        June 2025 – Present
*Collaborative Frontier Finance (CFF)*

- Built **Fund Manager Portal**, a comprehensive platform for Early Stage Capital Provider (ESCP) Network managing 260+ fund manager profiles across 4 years of survey data (2021-2024)
- Engineered full-stack application featuring automated application workflow, multi-year survey platform with version control, real-time analytics dashboard with WhatsApp-style instant updates, searchable network directory with advanced filtering, role-based access control, and blog/content management system
- Implemented real-time data synchronization using Supabase (PostgreSQL + Realtime + Storage) with React and TypeScript frontend
- Developed version 2 of internal database management tool with enhanced functionality and improved data architecture
- Created and maintained fund manager portfolio system with comprehensive data collection capabilities
- Built forum system for fund manager community engagement and knowledge sharing
- Draft strategic proposals and research reports leveraging data analytics for frontier finance initiatives
- Manage website updates and technical infrastructure supporting network operations

**Co-Founder & Business Development Lead**        October 2025 – Present
*Astarus AI*

- Co-founding innovative AI startup building **GPT2xLUT**, a continuous learning language model combining GPT-2 with dynamic Lookup Table (LUT) augmentation for real-time learning without full retraining
- Leading VC outreach, fundraising strategy, and investor relations for early-stage funding rounds
- Conducting comprehensive market research, competitive analysis, and strategic positioning
- Identifying high-value use cases and designing go-to-market strategy for adaptive AI systems

- Building strategic partnerships and managing business development initiatives
- Developed full-stack implementation with API, frontend, and database architecture featuring user authentication, multi-tenant infrastructure, and production-ready deployment

### Founder & Program Lead — July 2025 – Present
*Santa's Heart Foundation*

- Founded and lead youth-focused NGO providing free educational programs in financial literacy, creative thinking, AI awareness, and mental health support
- Successfully reached 50+ beneficiaries through structured outreach programs providing clothing, food, shoes, and educational materials to underserved youth and street children
- Led hands-on workshops and mentorship sessions for children and youth aged 5–25
- Building sustainable programs creating confident, tech-savvy, and emotionally intelligent future leaders
- Established social media presence documenting impact – Instagram: @santasheartfoundation

### Junior Data Analyst (Part-time, Pro Bono) — June 2025 – August 2025
*Algum Africa Capital*

- Led structured data collection and organization for business intelligence initiatives
- Built multiple regression models forecasting LPG demand in Mozambique market using objective scoring methodologies and statistical weightings
- Developed custom secure database system for efficient data management and analysis
- Applied econometric modeling techniques to support investment decision-making

### Web Platform Developer — May 2025
*SecureAid*

- Prototyped digital solution mitigating corruption in aid fund disbursements using blockchain transparency principles
- Deployed live platform: secureaid.online

### Algorithm Developer — April 2025 – May 2025
*DealFuze (UK VC)*

- Developed intelligent matching algorithm connecting investors with founders based on aligned investment goals and readiness metrics
- Worked under mentorship of Noella Spitz, Senior Developer, gaining advanced algorithm design experience

### Financial Consultant and Motivational Speaker — March 2024 – Present
*Growth to Mathare City Movement*

- Delivered financial literacy workshops empowering community members with practical money management skills
- Conducted motivational speeches inspiring youth development and entrepreneurship

**Mentee of Dr. Karanja Gacuca**                                    February 2025 – March 2025
*Wall Street Data Analyst Coaching*

- Handpicked for exclusive one-on-one mentorship based on exemplary analytical reporting
- Developed advanced analytics frameworks, decision-making methodologies, and executive presentation skills

**Data Analyst Intern**                                             February 2025 – March 2025
*Enkaare*

- Developed talent matching algorithms optimizing recruitment efficiency
- Created data-driven marketing strategy through comprehensive market research and competitive analysis

**Data Analyst (Short-Term Consulting)**                           January 2025 – February 2025
*USAID | ACDI/VOCA | RLA*

- Cleaned and structured large humanitarian datasets supporting Russia–Ukraine conflict analysis
- Conducted research and exploratory analysis informing UN economic recovery strategies
- Developed presentation materials for internal briefings and external stakeholder communications
- Completed consulting-style case assignment proposing data-driven use cases for development finance institutions

**Crypto Economics Intern**                                         January 2025 – March 2025
*Black Panther TKN*

- Gained exposure to crypto project business operations and tokenomics design
- Contributed mathematical modeling insights during strategic planning sessions

**Volunteer Research Note Taker**                                                         2025
*MIT Kuo Sharper Currency Volatility Center*

- Documented detailed research discussions supporting currency volatility trend analysis

**Award-Winning Data Analyst**                                      October 2024 – November 2024
*iLab Africa*

- Delivered top-ranked analysis of Kenya food prices dataset, recognized for analytical depth and accuracy
- Applied advanced statistical modeling, data visualization, R programming, and LaTeX documentation

## ⚙ TECHNICAL SKILLS

- **Full-Stack Development**: Expert in React, TypeScript, JavaScript, Vite, React Native, Django, and modern frontend frameworks
- **AI & Machine Learning**: Experience with GPT-2 implementation, continuous learning systems, LUT augmentation, and AI platform architecture

- **Predictive Modeling & Statistics**: Advanced statistical modeling, econometric analysis, regression analysis, ARIMA, VAR, and machine learning in R and Python
- **Data Analysis & Cleaning**: Expert data wrangling, exploratory analysis, and transformation using R, Python (Pandas, NumPy), Excel, and SQL
- **Productivity & Collaboration Analytics**: Specialized in Microsoft 365 analytics, team performance metrics, meeting analysis, and organizational productivity measurement
- **Data Visualization**: Interactive dashboards using Power BI, Tableau, Plotly, Recharts, D3.js, and Matplotlib
- **Database Management**: PostgreSQL (Supabase), SQL, NoSQL (Firebase, MongoDB), database architecture, and real-time data systems
- **Blockchain & Crypto**: Tokenomics design, smart contract concepts, Hyperledger Fabric, DeFi frameworks, and blockchain transparency systems
- **API Development & Integration**: RESTful APIs, third-party integrations (SeamlessHR, etc.), real-time subscriptions, and webhook systems
- **Cloud & Deployment**: Render, Vercel, cloud-based solutions, CI/CD pipelines, and scalable architecture
- **UI/UX Design**: Tailwind CSS, shadcn/ui, responsive design, and modern interface development
- **Research & Documentation**: Technical writing, white papers, litepapers, proposal drafting, strategic reports, and LaTeX

## KEY PROJECTS & PLATFORMS

### VGG Holdings Portal — 2025 – Ongoing
Enterprise multi-company management platform with AI-powered assistant providing role-specific insights through natural language queries. Features unified dashboard monitoring child companies, granular role-based permissions, real-time performance analytics, API integration hub (SeamlessHR, etc.), and workflow automation. Built with React, TypeScript, Vite, Supabase, Tailwind CSS, and shadcn/ui. Live and optimizing operations.

### Fund Manager Portal — 2025 – Ongoing
Comprehensive ESCP Network platform managing 260+ fund managers across 4-year survey history. Features automated application workflow, multi-year survey system with version control, real-time WhatsApp-style analytics, searchable member profiles with advanced filtering, secure role-based access, and community blog system. Full-stack: React + TypeScript + Supabase (PostgreSQL + Realtime).

### GPT2xLUT – Continuous Learning AI — 2025 – Ongoing
Innovative language model combining GPT-2 with dynamic Lookup Table augmentation enabling real-time learning without full retraining. Features persistent knowledge storage via Supabase, user-specific personalization, multi-tenant architecture, and production-ready infrastructure. Leading business development and VC fundraising.

### AI Research Commercialization Assessment Tool — Ongoing
Intelligent platform evaluating research commercialization potential using configurable metrics framework. Features default and custom scoring criteria with user-defined weightages, generates comprehensive analytics reports identifying strengths, weaknesses, market readiness scores. Supports strategic decision-making for technology transfer offices and research institutions.

### Bunifu Student Platform — Ongoing (Seeking Funding)
Comprehensive student platform consolidating study materials, job opportunities, event management, and career development tools. Features gamification elements enhancing engagement and collaborative learning spaces. Designed to streamline academic and professional growth.

**TengaPesa Platform – tengapesa.onrender.com**                                    **Ongoing**
Proposed M-PESA enhancement enabling purpose-specific mini-wallets with configurable lock mechanisms and withdrawal conditions for disciplined financial planning and savings goals.

**BizLens SME Management Platform**                                                **Ongoing**
Comprehensive React Native business management solution helping SME owners manage accounting, inventory, and operations more efficiently and accurately with mobile-first design.

**MemVault Platform – memvault.onrender.com**                                          **2025**
Integrated planning platform combining journaling, event scheduling, and photo storage. Fusion of journal, Google Calendar, and Google Photos with emphasis on privacy and usability.

**SecureAid – secureaid.online**                                                       **2025**
Digital solution mitigating corruption in NGO fund disbursements through transparent tracking and accountability mechanisms.

**TransparentTrack NGO System**                                                        **2024**
End-to-end blockchain solution ensuring transparent fund disbursement for NGOs. Implemented with Django backend, React frontend, and Hyperledger Fabric blockchain infrastructure.

**Kenyan Food Price Econometric Analysis**                                             **2024**
Award-winning longitudinal study (2006-2024) developing econometric models identifying price volatility drivers. Applied ARIMA and VAR methodologies producing policy recommendations. Recognized as top analysis across all cohorts.

## RESEARCH & STRATEGIC CONSULTING

- **Enterprise Productivity Research**: Microsoft 365 comprehensive analysis measuring departmental performance, meeting efficiency, email patterns, and collaboration metrics – delivered actionable insights for organizational optimization
- **Blockchain & Tokenomics**: Gold-backed stablecoin feasibility study with complete tokenomics framework, market analysis, remittance framework designs, and white paper development
- **Telemedicine Strategic Proposals**: Safaricom telemedicine initiative proposals covering Helium Health ecosystem integration, collaborated with C-suite executives across partner organizations
- **Islamic Banking Research**: Customer acquisition strategy analysis for Islamic banking sector with data-driven recommendations
- **Agribusiness Intelligence**: Market research with private equity applications supporting investment decision-making
- **Humanitarian Analysis**: Russia–Ukraine conflict impact analysis supporting UN humanitarian response planning and economic recovery strategies
- **LPG Market Forecasting**: Econometric modeling forecasting LPG demand in Mozambique using regression analysis and statistical weightings
- **Frontier Finance**: Multiple strategic proposals and research reports for early-stage capital providers in frontier markets

## MATHEMATICS ACHIEVEMENTS

- **7th place nationwide** – 2023 Mathematics Olympiad
- **National Representative** – East African Mathematics Olympiad (2024)
- **4th place nationwide** – 2023 Brookside National Mathematics Contest
- **6th place nationwide** – 2022 Round 1 Mathematics Olympiad

## ✹ CERTIFICATIONS

- Olympiad Teacher Certification (CEMASTEA & University of Nairobi, December 2023)
- Huawei Data Analytics Certification
- Harvard-Standard Peer Counsellor Certification (Nairobi School)

## ♥ PERSONAL INTERESTS

- Professional swimming and fitness training
- Advanced mathematics and algorithmic problem-solving
- Social entrepreneurship and community development
- AI/ML research and emerging technology trends

## 👥 REFERENCES

**Noella Spitz**
CTO, ProDG Studios                    noella@prodg.xyz
                                      +447852432181

**Dr. Richard Kyalo**
Technical Lead Data Analytics, USAID    kyalorichard11@gmail.com
                                        +254710359903