

SHAMMAH AGYARE

Product Developer & Designer

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SUMMARY

Multi-disciplinary Software Developer and data scientist with 4+ years' experience in full-stack mobile/web application development, UI/UX product design, and product analytics. Specialized in Flutter and Django with a portfolio spanning environmental sustainability, health tech, and socio-economic solutions. Proven track record in predictive modelling, RESTful API integration, design prototyping, and real-time dashboarding. Passionate about inclusive technology, impact-driven platforms, and scaling African tech innovation.

CORE COMPETENCIES

Cross-platform mobile and web development		
Product development	ETL pipelines	API integration
Real-time dashboards & BI reporting		product architecture
UI/UX research, wireframing, accessibility design & testing		
diagnostic analysis	predictive analytics	Machine learning

EXPERIENCE

Backend developer & BI analyst (Consultant)

Aqualinqs Digital Agency

- 09/2022 - 04/2025 Remote
- Developed Flutter-based EcoMine Watch mobile app to monitor illegal mining (Galamsey) impacts in Ghana.
- Designed 10+ cross-platform applications using Flutter framework, engaging a team of 25+ developers.
- Increased client satisfaction rate by 20% by implementing automated reporting systems with SQL and Python.
- Enhanced product deployment speed by 35% by integrating automated testing protocols.
- Boosted the DeafCan Talk Mobile App user interface satisfaction by 30% by leveraging advanced Figma prototyping techniques.
- Enhanced a retail optical store's database query efficiency by 40% by optimizing indexes and eliminating redundancies.

Data scientist & Product Designer

Best Sight Optical's limited

- 08/2023 - 07/2024 Ghana
- Built a CRM dashboard with Firebase and Flutter improving retention by 40%.
- Deployed a customer retention prediction prediction model (85% accuracy) and sentiment analysis engine, resulting in a 20%reduction in customer attrition.
- Spearheaded a Python-based predictive analytics modelling project, forecasting demand and boosting revenue by 40% .
- Created flutterflow UI/UX prototypes for patient engagement and service flow, improving satisfaction ratings by 25%
- Supported integration of 30 APIs, managing data flow across 20 applications.
- Enhanced data accuracy by 35% by deploying advanced data validation techniques and machine learning algorithms

TECH STACK

Languages & Frameworks			
Dart	Python	JavaScript	SQL
HTML	Django	Node.js	Express.js
UI/UX & Front-End			
Figma	Canva	Flutter	Adobe
Databases			
PostgreSQL	MySQL	SQLite	
MS SQL Server	MongoDB	Firebase	
ETL & Data Integration			
Apache Airflow	Power Automate		
Docker	REST APIs	Batch Workflows	
API-based Ingestion			
Cloud & Infrastructure			
Google Cloud	Computing	AWS	
Firebase	SAP ERP(CS/PM)		
Libraries			
Dplyr	Tidymverse	NumPy	Pandas
Seaborn	Matplotlib	Scikit-Learn	
Other Tools			
Microsoft Office Suite		Google Analytics	
Git	ArcGIS	Trello	Slack
GitHub Pages		Monday.com	
SmartPLS	Visual Studio		
CRM Systems			

EXPERIENCE

Chief Data Specialist/M&E Advisor

Agriculture and Climate Empowerment Centre

📅 09/2021 - 06/2023 📍 West Africa

- Designed and implemented a Data Governance & Project Monitoring System for a USAID \$500K bio-energy project in Sierra Leone—achieving 100% compliance with all 46 KPIs.
- Applied NLP techniques to analyze survey data, improving climate justice policy recommendations by 30%.
- Built data audit systems within the USAID Bio-stove project delivery that met USAID standards.
- Analyzed and visualized 200+ quantitative and qualitative data sets from different researchworks using R, Python, Tableau and Power Bi, which resulted in designing a coastal resourcesmanagement dashboard influencing policy action in Ghana.

EDUCATION & CERTIFICATIONS

Front-End Developer Professional Certification

Microsoft

UX Design Professional Certification

Google

Applied AI Developer Certification

IBM

Back-End Development Professional Certificate

IBM

Certificate in Associate Data Scientist

DataCamp

MicroMasters Program in Data Analysis

MITX Online

CPD Certificate in Monitoring and evaluation

Monitoring and Evaluation Academy of Excellence

Data engineering certification

Trestle Academy Ghana

Certificate in Applied Data Science with Python

University of Michigan

Certificate in Business Analytics with R

University of Illinois Urbana-Champaign

Postgraduate diploma in Project Management

University of California, Berkeley

LANGUAGES

English
Native



French
Intermediate



Spanish
Beginner



Twi
Native



KEY ACHIEVEMENTS



USAID Project Success

Achieved 100% compliance with 46 KPIs in USAID project.



Revenue Increase

Boosted revenue by 40% through demand forecasting with Python.



Client Satisfaction Boost

Improved client satisfaction by 20% using automated reporting.



API Integration Support

Supported integration of 30 APIs across 20 applications.

PROJECTS

Ghana beyond Galamsey ML Dashboard

Built a predictive dashboard to visualize illegal mining activity with live data feeds.

EcoMine Watch App

Mobile solution for galamsey mining impact monitoring across health, water and socio-economic data.

Aquaculture Market Web

A block chain traceability system and web app linking aquaculture value chain actors in Ghana, boosting sustainability and market access.

WeSearch 4 Development

A Django based Research and inclusive data storytelling web app amplifying gender-climate narratives and reducing climate injustice.

Retirement Planner App

Personalized savings and investment tracker built in Flutter with smart financial goals recommendations.

DeafCanTalk UI/UX & Frontend

Designed Wireframes, mockups and prototype for a flutter based mobile app empowering the deaf communities globally.

AWARDS & MEMBERSHIP



Because She Can

📅 2024 - Present

Active member



Women in Tech Africa

📅 2021 - Present

Active member



Africa Matters Initiative

📅 2024 - Present

Climate Justice Ambassador



VOLUNTEERING

Environmental research analyst/Climate justice ambassador

Africa Matters Initiative, South Africa

01/2025 - 04/2025

- Developed and launched the WeSEARCH 4 Development web app for climate data collection, management and storytelling, resulting in enhanced evidence-based advocacy efforts.
- Deployed a question-answering system to support public education campaigns on climate-smart practices, increasing engagement by 20%.
- Created 15+ visually impactful dashboards and impact story reports in PowerBI and Tableau, influencing fundraising allocation strategies.
- Trained 25 young women (including PwDs) in climate research and advocacy actions, contributing to enhanced voice and women's participation in climate decision-making in Northern Ghana.

AWARDS & MEMBERSHIP



Blossom Academy
Data Analytics
Fellowship

2025 - Present

Fellow

INTERESTS

Inclusive design

Women & Youth empowerment

Podcasting

Tech for sustainability

Community impact app development

Research for Development

Travelling and hiking Enthusiat

