SMAILA AMOANU

FULL-STACK SOFTWARE DEVELOPER

Reno, Nevada, USA | samoanu@unr.edu | +1 775 530 5914 | Portfolio | GitHub

Python | Flask | JavaScript/TypeScript | React | SQL | Linux

Live products: AttendPro | SchoolPro | Acadelyn

PROFESSIONAL SUMMARY

Full-stack developer who has built and shipped six web applications that people use for school administration, event and workforce attendance, church operations, HR and payroll, digital publishing, and academic discovery. Works mainly in Python, Flask, SQL, JavaScript/TypeScript, and React, and deploys and maintains everything on Linux. Enjoys working directly with users: learning how they really work, turning that into software, training their teams, and staying on to support them after launch. Currently completing a PhD in Statistics and Data Science at the University of Nevada, Reno.

TECHNICAL SKILLS

Languages: Python, SQL, JavaScript, TypeScript, R, PHP, Bash, HTML/CSS
Web & data: Flask, SQLAlchemy, REST APIs, Node.js/Express, React, PostgreSQL, MySQL, SQLite, authentication and role-based access
Deployment: Linux VPS, Nginx, Gunicorn, SSL/HTTPS, Git/GitHub, schema migrations, health checks, backup and restore
Data tools: pandas, NumPy, scikit-learn, XGBoost, SHAP, time series analysis, Monte Carlo simulation

SOFTWARE DEVELOPMENT EXPERIENCE

Full-Stack Software Developer | Arkos DataTeks | 2019 to Present

- Take each product from the first requirements conversation through data modeling, build, deployment, training, and ongoing support.
- Work side by side with schools, event organizers, churches, and administrative teams to turn the way they already work into practical software.
- Run production services on Linux VPS infrastructure, handling Nginx, Gunicorn, HTTPS, database migrations, backups, and release checks.

Database Developer & Consultant | Independent Client Projects | 2019 to Present

- Designed relational database systems for clients in Ghana and abroad, handling everything from requirements and ERDs to forms, queries, dashboards, automated reports, training, and handover.

Database Developer & Consultant | PEKO Plaza | Jun 2020 to Apr 2021 | Kumasi, Ghana

- Moved several business divisions off spreadsheets and onto relational databases, then set up routine reporting, backups, and user training.

SELECTED PRODUCTS

Arkos AttendPro | Event and Workforce Management Platform

- Built AttendPro to handle event registration and check-in, daily workforce attendance, session schedules, participant records, audit trails, and reports.
- Made check-in hard to fake with rotating QR credentials, server-side eligibility checks, duplicate prevention, location checks that account for GPS uncertainty, camera scanning, and optional facial verification.
- Selected for SkillFest'26 and scheduled for the African Youth Summit, with each setup tailored to how the organizer runs registration and attendance.

Arkos SchoolPro | School Management Platform

- Built a role-based system covering admissions, student records, academics, exams, attendance, fees, HR and payroll, inventory, communication, and management reports.
- Deployed it for GFI and supported setup, data migration, staff training, controlled release of exam scores, backups, and everyday use.

Smaila Reader | Digital Bookstore and Web Reader

- Built a direct-sales storefront and browser-based reader for my own independently published books, so readers can buy and start reading in one place.
- Created the admin side for adding books, reviewing purchases, managing reader access, and sending updates, with no third-party marketplace in between.

ADDITIONAL SOFTWARE PRODUCTS

Arkos ChurchPro | Church Management and Ministry Operations Platform

- Built member and ministry records, communication, certificates, pastoral reports, and a mobile-friendly member portal.
- Gave churches several ways to check people in, including rotating QR, kiosk, member passes, and a manual fallback, with notifications built in.

Arkos HR Pro | Payroll, HR, and Employee Self-Service Platform

- Built employee records, payroll, payslips, leave, attendance, departments, and bank details, plus self-registration and self-service so staff can handle routine updates themselves.

Acadelyn.com | Academic Opportunity Discovery Platform

- Built and launched a searchable platform drawing on university faculty and conference data, with user accounts, sign-in, and saved opportunities.
- Gathered feedback through SIAM and academic community outreach, and used it to improve the product and plan its recommendation features.

SELECTED TECHNICAL WORK

Attendance Verification Study | Arkos AttendPro | 2026

- Stress-tested QR lifetimes, duplicate handling, and geofence rules across 8,800 protocol observations, 8,000 token-lifetime observations, and 75,000 controlled location simulations.

Relationship Dissolution Forecasting | Independent Research | 2026

- Compared logistic regression, Random Forest, and XGBoost on longitudinal survey data; the best held-out ROC-AUC was 0.911 at three years and 0.889 at five years.

ARMA QMLE under Weak Dependence | JSM 2026 Presenter | Aug 2026 | Boston, MA

- Developed and tested inference methods for ARMA models with weakly dependent shocks, using Monte Carlo simulation and sandwich/HAC standard errors.

EDUCATION

PhD in Statistics and Data Science | University of Nevada, Reno | 2024 to Present | Reno, NV

- Passed doctoral qualifying examinations in Probability and Statistics (2025) and Mathematical Statistics (2026).

MSc in Mathematical Sciences | African Institute for Mathematical Sciences, Rwanda | 2023 to 2024

BSc in Statistics, First Class Honors | Kwame Nkrumah University of Science and Technology | 2018 to 2022 | Ghana

TEACHING & TECHNICAL COMMUNICATION

Graduate Teaching Assistant and Instructor | University of Nevada, Reno | 2024 to Present

- Teach Precalculus, Calculus, and introductory statistics and probability through lectures, recitations, problem solving, grading, and office hours.

Technical Educator | DataTechsTutorials

- Grew a YouTube audience of 15,200+ subscribers with practical lessons on SQL, Microsoft Access, Excel, database design, and business systems.

RECOGNITION

Scholarship of Merit, University of Nevada, Reno (2024) | Scholarship of Merit, AIMS Rwanda (2023 to 2024) | First Class Honors, KNUST