

JANE IFEOMA UGWU

QA Automation Engineer (Python | API | Playwright | AI Validation)

Benin City, Nigeria

janeugwuicon@gmail.com | +234 906 9521 953

GitHub: <https://github.com/janeugwuicon>

LinkedIn: <https://linkedin.com/in/icon-jane-a007b2302>

PROFESSIONAL SUMMARY

QA Automation Engineer with hands-on experience in manual testing, API automation, UI automation, backend data validation, and AI system testing.

I build structured test frameworks that protect business-critical systems from failure, especially transaction-heavy fintech applications.

Strong in risk-based testing, clean test design, CI/CD pipelines, SQL validation, and automation stability.

Focused on preventing production issues before they affect users.

CORE SKILLS

Manual & Quality Strategy

- SDLC & STLC
- Risk-Based Testing (Impact vs Likelihood)
- Test Planning & Quality Strategy
- Boundary Value Analysis (BVA)
- Equivalence Partitioning
- Decision Tables
- Traceability Matrix
- Defect Lifecycle (Severity vs Priority)
- Smoke, Regression & UAT Testing

API Automation

- Python
- Pytest

- Requests
- JSON Schema Validation
- Fixtures & Parametrization
- Data-Driven Testing
- Token-Based Authentication
- REST API Testing

UI Automation

- Playwright (Python)
- Page Object Model (POM)
- Cross-browser Testing
- Parallel Execution
- Flaky Test Stabilization
- Network Interception
- Screenshot & HTML Reporting

Backend & Database

- PostgreSQL
- SQL (Joins, Aggregates, Data Integrity)
- Transaction Validation
- Data Reconciliation Checks

DevOps & CI/CD

- Git & GitHub
- GitHub Actions
- Docker
- Environment Configuration (.env)
- Containerized Test Execution

Performance & Security

- Locust
- k6
- OWASP ZAP
- Basic SQL Injection Detection
- Token & Session Inspection

AI / LLM Validation

- LLM Output Evaluation
- Hallucination Detection
- Prompt Testing

- RAG Validation
 - Cosine Similarity Scoring
 - Edge Case Analysis for AI Systems
-

PROFESSIONAL EXPERIENCE

QA Engineer

Nigerian Air Force | 2023 – 2026

- Designed structured test cases using Boundary Value Analysis and Equivalence Partitioning.
 - Executed regression, smoke, and functional testing on internal systems.
 - Logged and tracked defects in Jira with clear steps, severity, and impact.
 - Participated in UAT sessions to validate business requirements.
 - Performed SQL queries to verify backend data accuracy and transaction consistency.
 - Worked closely with developers to reproduce and resolve critical issues.
 - Helped reduce recurring production defects through improved test coverage.
-

Quality Assurance Analyst (AI Systems)

ALUSOFT Tech | Contract | 2024 – 2025

- Evaluated AI-generated responses for factual accuracy and safety.
 - Identified hallucination patterns and documented edge cases.
 - Conducted structured prompt testing to measure response consistency.
 - Validated AI outputs against reference data using similarity scoring.
 - Reported unsafe outputs and improved dataset quality.
 - Supported reliability improvements in AI-driven systems.
-

TECHNICAL PROJECTS

NexusPay – End-to-End Fintech QA Simulation

GitHub: https://github.com/janeugwuicon/NEXUSPAY_OA_PROJECT

- Built a complete quality framework for a simulated high-frequency fintech wallet.
- Created full quality strategy and structured test plan.

- Designed risk matrix for transaction failure analysis.
 - Wrote detailed test cases for onboarding, transfers, crypto swap, and AI features.
 - Built traceability matrix linking requirements to coverage.
 - Performed browser investigations using DevTools (Network, JWT, Storage).
 - Wrote SQL scripts to detect orphaned transactions and balance mismatches.
 - Documented performance and security observations.
-

API Automation Framework (Python + Pytest)

- Built reusable API client handling authentication and environment switching.
 - Automated CRUD operations with positive and negative scenarios.
 - Implemented JSON schema validation to detect breaking API changes.
 - Used fixtures and parametrization for scalable test design.
 - Integrated framework into GitHub Actions for automatic execution.
 - Containerized test suite using Docker for consistent CI runs.
-

Playwright End-to-End Automation Suite

- Automated critical user flows (Login → Search → Transfer → Checkout).
 - Applied Page Object Model for maintainable structure.
 - Reduced flaky failures using proper wait strategies.
 - Enabled parallel browser execution for faster feedback.
 - Configured CI workflow to capture failure screenshots and reports.
-

AI Testing Lab

- Built validation scripts for AI-generated financial responses.
 - Compared model outputs against ground truth references.
 - Implemented cosine similarity scoring to measure response accuracy.
 - Simulated RAG-based FAQ testing.
 - Documented prompt injection and hallucination risks.
-

EDUCATION

University of Ibadan
Bachelor of Education (B.Ed.) – Educational Technology
First Class Honours | 2025