

Smith Abiodun Osagie

SOFTWARE ENGINEER. FOUNDER, ICOWEB AGENCY

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PERSONAL STATEMENT

Software engineer with a Bachelor of Education in Mathematics and over four years of commercial experience building production mobile and web systems for clients across Nigeria, the United Kingdom, the United States, Germany, the Netherlands, Ukraine, Canada, and Australia. Founder and CEO of ICOWEB Agency, leading a team that delivers fintech, healthcare, ride-hailing, and business operations platforms, including ERP and accounting systems. Active contributor to Numd, an open-source numerical computing library for Dart, where I work on linear algebra, complex-number arithmetic, NumPy-style type promotion, and HDF5 scientific data storage.

Applying to a vocational programme in Portugal in Data Science, Machine Learning, and AI to formalise my training and move from applied software engineering into a research and data role. My quantitative background and existing scientific computing work provide a direct path to data-focused study and employment.

EDUCATION

Bachelor of Education in Mathematics, Ambrose Alli University, Benin City

2018

Coursework in linear algebra, calculus, probability, statistics, and numerical methods. This quantitative grounding underpins my current work in numerical computing and my transition into data science and machine learning.

App Brewery Flutter Bootcamp, Angela Yu (Udemy)

2021

Continuing education in Dart, mobile architecture, and software engineering practice.

TECHNICAL SKILLS

Quantitative and Scientific Computing: Linear algebra, complex number systems (complex128), NumPy-style type promotion and dispatch, HDF5 scientific data storage, statistical reasoning, numerical methods

Programming Languages: Dart (advanced), JavaScript and TypeScript (intermediate), Swift (intermediate), PHP (intermediate), Python (working knowledge), Solidity (basic)

Frameworks and Platforms: Flutter, Next.js, Node.js, Express, SwiftUI

Data and Backend: PostgreSQL, Supabase, Firebase, AWS, Google Cloud, RESTful APIs, GraphQL

State Management and Architecture: Riverpod, Provider, Bloc, MVVM, Clean Architecture, fpdart

AI and Machine Learning: TensorFlow Lite, on-device ML model deployment, ML Kit

Tools: Git and GitHub, CI and CD pipelines, Xcode, Android Studio, Figma, Adobe Creative Suite (Photoshop, Illustrator, After Effects, Premiere Pro)

PROFESSIONAL EXPERIENCE

Flutter Developer and Library Engineer, QHarbor Research, Netherlands (Remote)

Sep 2024 to Jan 2026

Numd open-source numerical computing library. Repository: github.com/qEncoder/numd

- Expanded the library from float64-only to int64 and complex128 support, broadening its computational range for scientific workloads.
- Designed a Complex number class with a complete set of mathematical operations, including addition, subtraction, multiplication, division, conjugation, magnitude, and phase.
- Implemented enum-based type management and dispatch for generic operations across data types, modelling NumPy-style type promotion to handle mixed-type arithmetic such as float64 and complex128.
- Contributed to HDF5 integration for reading and writing large scientific datasets, and to data-visualisation workflows for plotting and analysis.
- Wrote unit tests, technical documentation, and usage examples to support open-source community adoption.

Founder and CEO, ICOWEB Agency, Port Harcourt, Nigeria

2022 to Present

Design and engineering studio serving clients in Nigeria, the United States, the United Kingdom, Germany, Canada, and Australia. icowebagency.com

- Lead a team that includes a CTO, a backend engineer, and product developers across mobile and web.
- Set technical direction, run client discovery, scope deliverables, and approve architecture and security decisions on every engagement.
- Delivered fintech, healthcare, ride-hailing, and business operations platforms for clients, including VotixCare, Bglory Rides, Wakajugbe, Cinderella Travel, Evvy Hairs, Julirose Hotels, Generations Specialist Hospital, Commutee (United Kingdom), and the Abia State Government portal.
- Building Forza Operations Platform, a combined ERP and accounting system for Forza Projects Limited, and an inventory management dashboard for a Port Harcourt business, both on one-month delivery timelines in 2026.
- Produce promotional video, motion graphics, and brand assets for client launches using Adobe Creative Suite.

Senior Flutter Developer, Elli App, Germany (Remote)

May 2024 to Present

Educational application for children with Down syndrome. Current, ongoing role.

- Built a multi-language experience supporting English, Croatian, Serbian, and Dutch, with content adapted per locale.
- Built adaptive learning paths and personalised feedback that adjust difficulty based on each child's interaction patterns.
- Implemented accessible UI components and gamification suited to children with different abilities.
- Owned TestFlight distribution, App Store, and Google Play preparation, and stakeholder feedback cycles.

Flutter Developer, Beepex (Remote)

2025 to Present

Cross-platform fintech application for digital payments and utilities. Current, ongoing role.

- Build and maintain the Beepex mobile app daily in Flutter, with Riverpod, Clean Architecture, and fpdart for typed error handling.
- Implement digital payments and utilities: gift card redemption, airtime, data, electricity (prepaid and postpaid), and TV subscriptions, with a wallet and OTP-secured authentication.

- Integrate Paystack for wallet funding and Reloadly for bill payments, on a Supabase edge-function backend with audit-trail logging and PIN-protected transactions.

Mobile Technical Lead, LYQX Agency, Ukraine (Remote)

Aug 2024 to Sep 2025

Led cross-functional Flutter teams delivering production applications for international clients.

- Established architecture patterns, coding standards, and testing practices across mobile projects.
- Ran code reviews, mentored mid-level and junior developers, and paired on hard problems.
- Set up CI and CD pipelines covering build, test, and store distribution for iOS and Android.
- Acted as the primary technical point of contact for stakeholders and translated requirements into technical specifications.

Earlier Roles

2022 to 2024

- Lead Flutter App Developer, Talosmart Agency, Lagos, January 2024 to May 2024. Set architecture and coding standards, mentored a small Flutter team, and managed schedules and budgets.
- Intermediate Flutter App Developer, iMotion Hub Technologies, Port Harcourt, January 2023 to December 2023. Led delivery of a service marketplace platform on Google Play, including secure payments and analytics.
- Junior Flutter App Developer, Ordibillz Technologies, Lagos, January 2022 to December 2022. Built responsive Flutter applications, integrated REST APIs, and contributed to UI implementations and code reviews.

SELECTED PROJECTS

Numd Numerical Computing Library (QHarbor Research, open-source). Dart library in the spirit of NumPy. Designed Complex128, type promotion and dispatch, and HDF5 integration for scientific data. Strengthened my grounding in linear algebra, generic programming, and numerical correctness. github.com/qEncoder/numd

Forza Operations Platform (ICOWEB Agency, in development 2026). A combined ERP and accounting system for Forza Projects Limited in Port Harcourt, replacing QuickBooks and manual processes with one platform. Role-based access for CEO, Manager, Finance, and Staff. Quotations and purchase orders with a revision and supersede model, invoices and proforma invoices with automatic numbering and per-client payment terms, Paystack payment links, equipment rental tracking with a live warehouse board, vendor scorecards and procurement, automatic staff performance metrics, document authorisation with a stored signature, soft delete with a recovery bin, and an immutable audit trail. Built with Next.js and React, with Nigerian tax handling (VAT and withholding).

Beepex Fintech Application. Cross-platform mobile platform for digital payments and utilities: gift card redemption (local and international), airtime, data, electricity (prepaid and postpaid), and TV subscriptions, with a wallet and OTP-secured authentication. Built in Flutter with Riverpod, Clean Architecture, and fpdart for typed error handling. Wallet powered by Paystack, bills powered by Reloadly, backend on Supabase edge functions with audit-trail logging and PIN-protected transactions.

VotixCare Optometry Practice Platform. A practice management suite for optometry clinics covering a patient mobile app (Flutter), a clinic dashboard, and an admin dashboard (Next.js with Recharts and Supabase). Patients book appointments, access prescriptions and examination results, message their optometrist, and shop for frames and contact lenses. Handles appointments, payments, reconciliation, and financial reporting, with timezone-correct aggregation for Lagos and Paystack webhook handling for payment integrity.

Inventory Management Dashboard (ICOWEB Agency, in development 2026). A stock and operations dashboard for a business in Port Harcourt, covering inventory tracking, stock movement, low-stock alerts, and reporting. Built with Next.js and Supabase.

Bglory Rides Ride-Hailing Platform. Commercial ride-hailing system with separate rider and driver applications. Built on Flutter, Riverpod, and GoRouter on the client, with a Node.js and Express backend on PostgreSQL. Features include real-time tracking, dynamic pricing, ride scheduling, push notifications, secure payments, and a flat-fee subscription model for drivers.

Wakajugbe Ride-Hailing Platform. Ride-hailing application with separate rider and driver apps, real-time trip tracking, push notifications when a nearby driver accepts a request, dynamic competitive pricing, and a driver subscription model where drivers keep their full ride earnings. Built in Flutter.

Elli App Educational Platform (Germany). Adaptive learning application for children with Down syndrome across English, Croatian, Serbian, and Dutch. A personalisation engine adjusts difficulty using interaction signals and provides accessible, gamified feedback.

Communittee Golf Club Community App (United Kingdom). Real-time chat and community features for UK golf clubs. Built on Flutter and the Stream Chat SDK with custom moderation, member directory, and notification flows.

TEACHING AND MENTORING

Independent Flutter and Dart instructor. I teach Dart and Flutter to paying students and have mentored over 20 developers to an intermediate level, several of whom now work professionally. A few students who could not afford the fees I taught at no cost, and they are doing well in their own careers today. I also create supporting tutorial content using Adobe Premiere Pro and After Effects.

LANGUAGES

- English: Professional working proficiency. IELTS planned.
- Yoruba: Native.

REFERENCES

- Stephan, CEO, QHarbor Research. Email: stephan@qharbor.nl
- Darko Rajin, CEO, Elli App. Email: darko.rajin@gmail.com