

OSINACHI NWAGBOSO

Fullstack Software Engineer

+447727827640 • osinachi88@outlook.com • <https://osinachi.nwagboso.com/> • Birmingham, UK

Summary

Full-stack software engineer building reliable products, internal tools, and data-driven systems across .NET, React, and Python. I work comfortably across product, backend, frontend, infrastructure, and production support, and I'm strongest in ambiguous problems that need clear ownership from design through delivery. Recent work includes a unified log explorer for distributed-system debugging, a C# annotation platform for computer-vision datasets, and Python tooling for direct camera video capture.

Projects

Nix - Collaborative Data Platform

React, TypeScript, C#, ASP.NET Core, PostgreSQL, Go, RabbitMQ, Docker

- Designed and built a full-stack collaborative workspace combining rich document editing, structured data, project workflows and real-time collaboration in a single self-hosted application.
- Developed a React/TypeScript frontend and ASP.NET Core backend with PostgreSQL row-level security, OIDC authentication, full-text/vector search, typed API contracts and granular workspace permissions.
- Implemented CRDT-based real-time editing with WebSocket synchronisation, live presence and an append-only update model for resilient multi-user collaboration.
- Built asynchronous Go workers using RabbitMQ for import, export, search indexing and background processing, alongside CLI and MCP interfaces for programmatic workspace access.
- Added advanced product features including kanban/calendar/timeline/spreadsheet views, formulas and rollups, PDF/DOCX/Markdown export, templates, file handling and AI-assisted workspace interactions.

Jobbie – AI job application platform

React, TypeScript, .NET, MongoDB, Redis

- Built a full-stack platform for creating tailored CVs, discovering jobs, tracking applications and automating repetitive job-application workflows.
- Developed a React/TypeScript frontend and modular ASP.NET Core backend with MongoDB, Redis, JWT authentication, document processing and Playwright-based PDF generation.
- Integrated multiple LLM providers with streaming generation, structured outputs and validation workflows for CV generation, job parsing and profile matching, alongside a browser extension for job capture and application autofill.

Experience

Redspeed International Ltd

Kidderminster, UK

Software Engineer II

01/2025 - Present

- Acting as product owner for a machine vision speed camera with an automated secondary-check mechanism, improving speed measurement accuracy by 25%.
- Built ASP.NET and React internal tooling used by field engineers across the organisation.
- Maintained multiple production systems across ASP.NET, React, and Python.
- Provisioning and maintaining production infrastructure across AWS, Azure, and Cloudflare services in a private-cloud environment using Docker, CI/CD pipelines, and GitLab container registries.
- Built automatic network-service discovery for distributed camera systems, reducing deployment and configuration failures and speeding deployments by 40%.
- Reduced stereo-calibration time by 75% by proposing background point detection and fixing a camera-feed defect that caused frame loss.

Redspeed International Ltd

Kidderminster, UK

Software Engineer

12/2022 - 01/2025

- Owned production backend systems from requirements and architecture through implementation, testing, deployment, and operational support.
- Built .NET desktop applications in WPF, WinForms, and Avalonia used by multiple police forces.
- Designed schemas, indexes, and caching strategies across MongoDB, relational databases, and Redis, with responsibility for performance and data correctness.
- Provided Tier 3 production support across application, database, infrastructure, and messaging layers.
- Improved engineering quality through automated testing, CI/CD, code review, and incremental modernisation of legacy ASP.NET Web Forms, Windows Forms, and jQuery systems.
- Reduced incident-resolution time by 25% through improved incident workflows and deployment of internal operational tooling.
- Reduced engineering onboarding time by 50% through adoption of AI-assisted development tooling.

Experience

Redspeed International Ltd

Kidderminster, UK

Graduate Software Engineer

04/2022 - 12/2022

- Built full-stack applications with Blazor and ASP.NET, alongside desktop applications in WPF and Avalonia.
- Contributed to multiple production systems and radar-based speed-camera software.
- Rapidly onboarded onto unfamiliar codebases and became productive within days.
- Developed a traffic-light programming solution with Arduino C++ by reverse engineering a system whose original source code had been lost.

Skills

Backend & distributed systems:

NET · ASP.NET Core · REST APIs · microservices · CQRS · RabbitMQ · WebSockets · event-driven systems · System design/documentation skills

AI & data: LLM APIs · structured outputs · guardrails · pgvector · PostgreSQL · MongoDB · Redis · DynamoDB

Cloud & infrastructure: AWS · Azure · Terraform · Docker · GitHub Actions · Azure DevOps · CI/CD · serverless

Security & frontend: OAuth/OIDC · JWT · IAM · PostgreSQL RLS · AES encryption · React · Node.js

Education

Coventry University

Coventry, UK

MSc Computer Science (Distinction)

- Developed a grounding in machine learning and artificial intelligence, supported by software engineering theory and secure software design.
- Explored web and mobile application design.

Anglia Ruskin University

Cambridge, UK

B.Eng. (Hons) Computer Science (First class)

- Built foundations in software engineering, networking, cloud computing, computer hardware and mathematics.
- Applied computer science principles through projects in distributed systems, graphics programming, data structures and algorithms.