

INNOCENT ONYENONACHI

AI ENGINEER | RAG, AGENT WORKFLOWS AND ML SYSTEMS

Liverpool, UK | innocent@onyenonachi.org

innocent.onyenonachi.org | linkedin.com/in/ichibuokem

PROFILE

AI engineer with 6+ years across software and product engineering, with hands-on AI delivery since 2024. Built LLM-powered copilot workflows, a multimodal RAG prototype and ML research pipelines. Experience spans retrieval, low-resource inference experiments, visual error analysis and FastAPI integrations for asynchronous processing. MSc Artificial Intelligence and Data Science with Distinction; currently a Research Assistant at Keele University.

TECHNICAL SKILLS

AI and machine learning: Python, PyTorch, scikit-learn, Hugging Face, LangChain, large language models (LLMs), retrieval-augmented generation (RAG), ChromaDB, prompt engineering, segmentation and classification

Research and evaluation: Experimental design, ML/CV workflow support, visual error review, low-resource inference experiments

Backend and delivery: FastAPI, REST APIs, PostgreSQL, Supabase, AWS S3 and SQS, GCP, Docker, Git, CI/CD, testing, background jobs, authentication and role-based access control

Product engineering: TypeScript, JavaScript, React, Next.js, enterprise API integrations

PROFESSIONAL EXPERIENCE

Research Assistant | Keele University

May 2026 - Present | Keele, UK

- Support current university research activity.

Founding AI Product Engineer | tich Global

Oct 2025 - Jan 2026 | Manchester, UK

- Built an AI copilot MVP, integrating LLM capabilities into automated job-matching workflows.
- Developed React/Next.js product flows and integrations connecting users to the copilot workflow.

AI Research Engineer, MSc Project | Keele University

Sep 2024 - Sep 2025 | Keele, UK

- Developed a multimodal RAG system using LangChain and ChromaDB, combining document retrieval with prompt orchestration.
- Developed a UAV computer vision research pipeline with segmentation and classification experiments and visual error review.

AI & Data Intern | Britari International

Jul 2024 - Sep 2024 | Abuja, Nigeria

- Used Python for data analysis, reporting automation and decision-support dashboards.

Product Engineer, Front-End & UX | TeleSoftas

May 2024 - Jul 2024 | Abuja, Nigeria

- Delivered responsive product interfaces through frontend engineering, user-centred design and Agile iteration.

PROFESSIONAL EXPERIENCE CONTINUED

AI Frontend Engineer | Hush42

Jan 2024 - May 2024 | Remote, US

- Built frontend architecture for a multimodal AI content product covering text, audio, image and video workflows.
- Integrated AI content and media APIs, working with backend engineers on text-to-speech, voice and rendering flows.

Software Engineer, AI Platforms | ByteWorks Technology Solutions

Aug 2022 - Nov 2023 | Abuja, Nigeria

- Delivered enterprise software interfaces and integrations with cross-functional engineering teams.

SELECTED AI PROJECTS

CallsAid Safety | Conversational workflow MVP

- Built WhatsApp-first incident intake for text and voice, with transcription, structured classification adapters, follow-up questions and rule-based escalation.
- Implemented supervisor routing, retryable background jobs, a tenant-scoped API and an audit trail to support incident review.

Multimodal RAG Assistant | Independent prototype

- Built PDF question answering with LangChain, ChromaDB and Hugging Face models, including retrieval, prompt orchestration and low-resource inference experiments.

EcoVision | Computer vision research prototype

- Built FastAPI integrations for presigned Amazon S3 uploads and Amazon SQS background-job messaging, connecting the application with AI processing components.

Subra | AI accountability platform in development

- Developed FastAPI authentication with OpenID Connect, role-based access control and tenant context; implemented Ed25519 signing adapters with HashiCorp Vault Transit integration.

EARLIER EXPERIENCE

ByteWorks Technology Solutions | Frontend Engineer, Oct 2021 - Aug 2022; UI/UX Designer, Feb 2021 - Sep 2021. Delivered product interfaces, user flows, prototypes and design systems.

Sekani-Tech | Software Engineer, Front-End Systems | Sep 2019 - Jul 2020. Built and tested component-based enterprise web interfaces.

EDUCATION

MSc Artificial Intelligence and Data Science, Distinction | Keele University, UK | 2025

BSc Biochemistry | Kebbi State University of Science and Technology | 2015

RESEARCH COLLABORATION

Research Collaborator (Volunteer), Keele University | Oct 2025 - May 2026. Supported postgraduate ML/CV workflows and experimental design.