

KEN NWANGWU

AI AGENT & DATA PLATFORM ARCHITECT | TYPESCRIPT | PYTHON | POSTGRESQL

Hands-on architect building governed AI workers, secure data products, commercial APIs and resilient cloud operations.

United Kingdom | www.kencv.com | [GitHub](#) | [LinkedIn](#)

PROOF-OF-CAPABILITY: Recruiters and employers may submit a POC or solution-roadmap brief through kencv.com.

TECHNICAL PROFILE

AI systems architect, advanced Codex operator and maritime data specialist with 17+ years of domain and enterprise delivery experience. Uses Codex as a disciplined engineering environment rather than a chat tool: decomposing programmes into specialist agents, grounding work in live systems and source evidence, writing and reviewing TypeScript/Python/SQL, enforcing approvals, and carrying changes through test, deployment, monitoring and rollback. Comfortable owning the full path from data model and business rules to UI, API, CI/CD and operational support.

TECHNICAL CAPABILITY

- **Agentic AI engineering:** OpenAI Codex, multi-agent task design, tool use, browser-assisted workflows, human-in-the-loop review, confidence policies, evidence capture, prompt/runbook design and exception handling.
- **Application engineering:** TypeScript, JavaScript, React, Node.js, Express, Vite, tRPC, REST APIs, validation, authentication, payment and entitlement workflows.
- **Data engineering:** Python, SQL, PostgreSQL/Supabase, SQL Server, ETL, reference-data mapping, deduplication, staging queues, controlled upserts, RLS, audit logs and data dictionaries.
- **Cloud & operations:** GitHub Actions, Vercel, Azure, Google Cloud Storage, encrypted backup/restore, scheduled jobs, KPI telemetry, incident diagnosis and deployment verification.
- **Analytics & product:** Power BI, SSRS, Excel/VBA, Looker, operational dashboards, coverage/fill-rate analysis, API documentation, commercial data packaging and maritime decision support.

SELECTED ARCHITECTURES & EVIDENCE

Production AI Worker Estate | Python | Codex | PostgreSQL | GitHub Actions

Built specialist workflows for maritime class, inspections, fixtures, ports, newbuilds, company fleets and research. Workers use canonical mapping, deterministic deduplication, confidence-based write policies, review queues, source evidence and run-level KPI telemetry.

Self-Service Data API & Subscriber Portal | TypeScript | React | Node.js | Supabase | Stripe

Delivered a production commercial catalogue with protected resources, authentication, trial and paid entitlements, account-level quotas, key lifecycle controls, billing/webhooks, security regression checks and desktop/mobile QA.

Agent Operations Control Room | SQL monitoring | Scheduled reporting | Exception management

Created one operational view of heterogeneous workers and workflows, distinguishing healthy, failed, stale, blocked and not-observed states while preserving approvals and preventing report-driven production mutations.

Fixture & Document Ingestion Pipeline | Python | PDF parsing | Reference matching | Human review

Separated complex ingestion from the CRUD UI: parses broker reports, maps ports/zones/cargo/charterers to canonical tables, detects duplicates across legacy and new formats, stages uncertain rows and commits only policy-qualified records.

Off-Site Disaster Recovery | PostgreSQL | GCP | GitHub Actions | GPG

Automates schema/data dumps, RLS and function inventories, encrypted off-site storage, archive smoke tests and monthly isolated restore drills with machine-readable evidence.

PROFESSIONAL EXPERIENCE

E.A. Gibson Shipbrokers | Sep 2016 - Jul 2026

Data Manager

- Designed scalable databases, data models, reporting layers and operational applications from broker and management requirements.
- Led Azure/SQL Server migration and delivered Power BI reporting, CRM, event and client-output systems.
- Architected PROPEL for vessel, port and S&P data, improving the reliability and usability of commercial information workflows.
- Combined maritime data stewardship with practical product ownership, vendor coordination and stakeholder adoption.

Pangaia | 2022

Finance & Process Data Manager | Three-month contract engagement

- Re-established Oracle NetSuite processes and data flows while addressing finance and supply-chain integrity issues.
- Built management analytics and translated operational process gaps into governed system improvements.

Subsea 7 (UK Service Company) Ltd | Nov 2013 - Oct 2015

Group Engineering PMO Coordinator

- Administered Microsoft Project Server and SharePoint-based engineering systems, templates, fields and enterprise reporting.
- Built resource and project KPIs and trained 100+ users across global engineering teams and energy programmes.

S&P Global / IHS Markit | Jan 2009 - Nov 2013

Senior Analyst

- Processed AIS movement, fleet, port, class and sale-and-purchase data for commercial maritime intelligence products.
- Built Excel/VBA and Access tools, maintained high-quality vessel datasets and published weekly Fairplay Markets analysis.

DELIVERY APPROACH

- **Architecture before automation:** define data ownership, system boundaries, reference mappings, failure modes and approvals before increasing agent autonomy.
- **Evidence over theatre:** require tests, database reconciliation, artefacts, logs and rollback paths before calling a workflow production-ready.
- **Safe acceleration:** allow high-confidence automated writes only where validation and canonical mappings are strong; stage conflicts and uncertain evidence for human review.
- **Commercially grounded:** connect technical choices to customer value, licensing, security, operating cost, service levels and product positioning.

TECHNOLOGY STACK

Primary: OpenAI Codex, TypeScript, JavaScript, Python, SQL, PostgreSQL, Supabase, React, Node.js, GitHub Actions, Vercel, Azure, GCP, REST APIs.

Supporting: Power BI, SQL Server, BigQuery, Databricks, Microsoft Fabric, SSRS, GraphQL, Postman, Stripe, Oracle NetSuite, SharePoint, Project Server, UI Bakery, AppSheet and Power Platform.

Domain: Vessels, ports, ownership, class, inspections, sanctions, fixtures, newbuilds, ship finance, shipbroking, S&P markets and maritime API products.

EDUCATION, CERTIFICATIONS & AFFILIATIONS

City University London | Postgraduate Degree, Maritime Operations & Management, 2007-2008

Federal University of Technology Owerri | BSc, Maritime Management Technology, 2001-2005

Professional development: Microsoft Power BI and Advanced SQL; IBM Blockchain Essentials and Blockchain Developer; Coracle Tanker Chartering.

Affiliations: Affiliate Member, Institute of Chartered Shipbrokers; Affiliate, Chartered Institute of Logistics and Transport (UK).

Selected enterprise repositories are private. Architecture walkthroughs, scoped demonstrations and POC roadmaps are available subject to confidentiality.