Aidan Keith Naidoo

Cape Town, South Africa | +27 60 388 1627 | aidannaidoo2801@gmail.com | My Linkedin | My Github | Aidan.com

Full-stack engineer building LLM applications: RAG, agents, evaluation and AI safety

Education & Certifications

Varsity College Newlands — Cape Town, South Africa
Bachelor of Computer Science — Distinctions in all Curriculum Modules — *2022 – 2024*

- **Relevant Coursework:** Data Structures & Algorithms, Systems Architecture, Software Engineering, Databases.

AWS Cloud Practitioner | *Completed AWS modules: EC2, S3, IAM, core cloud services* — In progress

AI Engineering, Hyperskill by JetBrains | *RAG, AI Agents, Vector Stores, Evals & Guardrails* — 2026

Experience

Full-Stack Software Engineer (Contract) — Mar. 2026 – Present
Logistics Automation Systems — *Cape Town, South Africa*

- Built an internal CRM and operations platform with a modular **FastAPI (Python)** backend, **Next.js/React** frontend and **PostgreSQL**, modelling customers, RFQs, workflow stages and financials.
- Implemented **JWT auth with role-based access control** so gross-profit figures are visible only to authorised roles, plus a document pipeline on **AWS S3** with **Sentry** monitoring.
- Containerised the stack with **Docker**, covered API routes with **pytest**, and defined the **AWS** infrastructure as code with separate dev, staging and production environments.

Lead Developer — Jan. 2026 – Present
Paint the Cradle Pink (Charity Event) — *Johannesburg (remote)*

- Led development of the registration platform for a breast cancer awareness event using **TypeScript, Next.js and Prisma ORM**, with a hard 400-attendee cap, automatic waitlist promotion and triggered confirmation emails.
- Added CAPTCHA verification, protected admin routes and limited error logs to anonymous user IDs so no personal data reached Sentry; coordinated code reviews and user testing with volunteer developers.

Software Engineer (Own Venture) — Aug. 2024 – Dec. 2025
Emora Tradespace — *Cape Town, South Africa*

- Took a final-year university team project forward as a self-run venture, building a trading marketplace end to end with **C# / ASP.NET MVC (.NET Framework 4.8)**, **SQL Server** and Node.js APIs in TypeScript.
- Designed the **SQL Server** schema and added indexes to speed up slow queries, and built transactional email via SendGrid with retry and fallback handling so failed sends were logged and resent.

AI & LLM Projects

AI Race Engineer for F1 25 | *LangGraph, Ollama, Qdrant, Langfuse, FastAPI, Redis, TimescaleDB, Next.js* — 2026

- **LangGraph** agents call deterministic Python functions as tools so the model never does arithmetic; strategy calls pause at `interrupt()` for human approval and every decision is stored.
- **RAG** memory in **Qdrant**; **evals** on recorded race replays with known answers, traced in **Langfuse**; live telemetry to a React dashboard via **WebSockets**.

AI Property Manager | *FastAPI, PostgreSQL + pgvector, LangChain, Celery, Next.js, TypeScript* — 2026

- AI drafts, classifies and translates, but the landlord approves every action; local **Ollama** or any OpenAI-compatible provider.
- Designed for **POPIA**: ownership checks on every resource and an audit log written in the same database transaction as each change; tested with pytest, Vitest and Playwright.

LLM Engineering Playbooks | *LlamaIndex, OpenAI Agents SDK, MCP, DeepEval, Ragas, NeMo Guardrails* — 2026

- Local-first (Ollama, switchable to OpenAI, Anthropic or Groq): **RAG**, agents with memory, **MCP**, **evals** with a CI gate, and **safety** (guardrails, PII masking, red teaming).

Technical Skills

AI & LLM: LangChain, LangGraph, LlamaIndex, OpenAI Agents SDK, MCP, Ollama, Qdrant, Chroma, pgvector
Evals & Safety: DeepEval, Ragas, Langfuse, NeMo Guardrails, Presidio, LLM Guard
Languages & Backend: Python, TypeScript, C#, SQL, FastAPI, Next.js, React, Node.js, ASP.NET MVC, Prisma
Cloud, DevOps & Testing: AWS (EC2, S3, IAM), Docker, GitHub Actions, Redis, Git, pytest, Vitest, Playwright