

Virginia Mwega

Technical Writer & Documentation Engineer

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PROFESSIONAL SUMMARY

Technical writer and documentation engineer who builds the production AI systems I document — multi-agent pipelines, retrieval-augmented generation (RAG), and LLM safety floors — then formalizes them to ISO/IEC/IEEE standards and turns them into developer tutorials, API documentation, and architecture walkthroughs. Docs-as-code from the implementation outward.

EXPERIENCE

Independent Technical Writer & Documentation Engineer

2025 – Present

Self-Employed

- Build and ship full-stack AI products end to end, then document the live systems to ISO/IEC/IEEE standards — System Architecture Documents (ISO/IEC/IEEE 42010), Software Requirements Specifications (IEEE 29148), API and developer documentation, and QA findings reports.
- Publish developer tutorials and architecture walkthroughs on Hashnode and product/research essays on Medium — 7+ long-form posts, from Stripe webhook idempotency to multi-agent system design.
- Author “Field Notes,” a weekly build-in-public newsletter for a developer and parenting-tech audience.
- Surveyed 74 parents to inform product and content decisions, then published the findings as a narrative case study.

Founder & Full-Stack AI Engineer — FamNest

2026 – Present

AI Wellness Coach for Parents · Next.js, Supabase (RLS), Groq Llama 3.3 70B (OpenAI-swappable) · famnest-iota.vercel.app

- Architected the live multi-agent pipeline: a RAG-grounded coach drafts a memory-aware plan, a safety-reviewer agent returns ok/revise/crisis, a one-pass revise loop tightens flagged drafts, and a deterministic keyword crisis floor escalates self-harm language to support resources independent of the model — with graceful degradation to an offline fallback.
- Authored the full documentation set: an ISO/IEC/IEEE 42010 architecture document, an IEEE 29148 SRS (18 functional requirements), and a Technical Findings & Remediation Report — with HIPAA / Saudi MOH-aligned design (not certified).
- Ran an independent audit of my own deployed codebase — 4 confirmed defects with root-cause analysis and a prioritized fix plan — published as a public case study.

ADDITIONAL PRODUCTS SHIPPED

- **Fit Parent Plan** — AI fitness coaching; two streaming Claude agents, Stripe Checkout with idempotent webhooks. Rated 4.9/5 across 38 reviews. (Next.js)
- **Hirely** — AI hiring platform; conversational search via Claude tool use, CV parsing, AI-ranked matches, auto-drafted status emails. (Django, PostgreSQL)
- **PureNest Family** — wellness e-commerce built from scratch; idempotent Stripe webhooks, custom auth, and a Claude shopping assistant. (Next.js, Prisma)

PUBLICATIONS & SPEAKING

- “Building FamNest with Next.js, Supabase & a Multi-Agent Pipeline” — Hashnode.
- “Idempotent Stripe Webhooks: the Pattern That Survives Every Retry” — Hashnode.
- “I Audited My Own Live App and Found Four Bugs” — Hashnode.
- Agent Conf 2026 (Warsaw) — submitted 3 session proposals on production reliability and safety for multi-agent systems.

SKILLS

Technical Writing & Documentation: Developer tutorials, API and developer documentation, architecture walkthroughs, code samples, technical and QA findings reports, docs-as-code (Git, Markdown), ISO/IEC/IEEE 42010 architecture documents, IEEE 29148 software requirements specifications (SRS), compliance documentation (HIPAA, Saudi MOH).

Developer Content & Community: Developer experience (DX), build-in-public narrative, newsletter authorship, audience and survey research, conference speaking, technical blogging (Hashnode, Medium).

AI Engineering: Multi-agent orchestration, retrieval-augmented generation (RAG), LLM tool use and streaming, structured outputs, deterministic safety floors, provider-swappable LLM layer (Groq, OpenAI, Anthropic).

Stack & Tools: TypeScript, Python, SQL; Next.js, React, Django; Supabase / PostgreSQL (RLS), Prisma; Stripe; Git / GitHub; Vercel, Render.

CERTIFICATION

Full-Stack Engineering Certification — freeCodeCamp · 2025.