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SUMMARY

Senior full-stack engineer with 5+ years shipping production Laravel and TypeScript systems across SaaS, fintech, and consumer platforms. Currently lead engineering on a multi-product Laravel codebase powering two consumer travel brands (vacation packages / bookings and show ticketing) on a shared database, admin, and search stack — everything scoped by `product_id`. Built hybrid semantic search across brand-specific indexes, a repeatable Contentful-to-MySQL delta-sync pipeline with three-way merges and conflict reporting, and a recommendation engine with weighted multi-signal scoring. Depth in query optimization, external API integrations (Stripe Connect, CRM sync, headless CMS, ticketing feeds), and refactoring legacy monoliths into single-responsibility services. Comfortable owning changes end-to-end remotely.

EXPERIENCE

Global Tech Network — Software Developer

Feb 2024 – Present

Orlando, FL (Remote) · PHP 8, Laravel, TypeScript, NestJS, React, MySQL, Stripe Connect

- Lead engineering on a multi-product Laravel codebase powering Vacation Branson (vacation packages, lodging, booking-with-deposits) and Branson Show Tickets (show and attraction ticketing) — two consumer storefronts sharing one database, admin, and search stack, everything scoped by `product_id`. Built a hybrid semantic search engine serving two brand-specific indexes (BST catalog; VB landing pages + catalog): OpenAI embeddings generated at index time via a nightly reindex command, cached document matrix loaded into PHP, brute-force cosine scoring blended with lexical ranking (0.7/0.3 weighting) and a title-match boost. Graceful fallback to lexical-only when the embedding API is down.
- Designed and shipped a repeatable Contentful-to-MySQL delta-sync pipeline for the BST catalog (shows, venues, attractions, blog posts, show-time slots) with dry-run-first CLI tooling: JSON baseline snapshots on disk, per-column three-way merge (Contentful vs baseline vs local edits) with conflict reports for human review, idempotent upserts keyed on external IDs, and slug-based adoption of manually-recreated entries so imports never duplicate. Deletes in the external source are report-only, never destructive. Ran alongside daily ticketing-feed ingestion (schedules, pricing, availability) with idempotent upserts and hourly reconciliation jobs.
- Built a recommendation engine feeding weighted multi-signal scoring across a co-purchase matrix (from order data), semantic similarity, shared categories, rating, and price proximity. `WeightedScorer` renormalizes when a signal has no data for a pair — remaining weights re-scale to 100% instead of silently dragging the score to zero.
- Refactored a 1,600-line Stripe payment god-service into 7 single-responsibility services split along the API-wrapper vs business-policy boundary. Enforced idempotency via composite unique index on (`stripe_charge_id`, `type`) so replayed webhooks can't double-transfer. Added `retry-with-backoff` (30min → 1hr → 2hr) for failed transfers, deposit-deferral logic for marketplace payouts, and a deprecated delegating wrapper for the legacy method.
- Additionally lead engineering on Compliance Scorecard and Fortiffi (multi-tenant B2B SaaS products on Stripe Connect and Paystack), separate from the consumer travel codebase; manage one direct report; own architecture, REST API design, and code review; established shared documentation and PHPUnit testing conventions that cut feature delivery time by ~25%.

Sendafrika — Software Developer (Contract)

Sep 2023 – Jan 2024

Accra, Ghana · NestJS, MongoDB, Redis, Docker, GitHub Actions

- Built authentication, KYC, and onboarding modules for Sendafrika's MVP — clearing the founding team's compliance requirements before launch. Used Redis for session and rate-limit state; Docker for local and deployment environments; set up GitHub Actions CI/CD pipelines for automated testing and deploys.

- Worked directly with founders to scope and ship v1 within a four-month engagement.

Turntabl Ghana Limited — Software Engineer

Sep 2021 – Aug 2023

Accra, Ghana · Java, Kotlin, Spring Boot, PostgreSQL, Redis, Kafka, Docker

- Engineered a microservice-based trading engine in Java and Spring Boot with Redis and PostgreSQL — production-deployed in a financial services product line.
- Built a real-time tech-news aggregator in Kotlin and Spring Boot serving 15,000+ active users with WebSocket-based content delivery.
- Designed RESTful APIs, ORM mappings, and Flyway migrations across services; introduced Kafka and RabbitMQ for event-driven workflows between teams; containerised services with Docker for consistent dev-to-prod parity.

PROJECTS

Wayve — AI Travel Platform for Ghana (Solo, Live at joinwayve.com)

- Solo build. NestJS, Next.js, PostgreSQL with Prisma, Redis. Multi-LLM router with per-request-type profiles (latency, cost, quality), fallback chains, and a usage-and-cost ledger for unit-economics tracking. Zod schema validation on every model response.

GearDockGH — Live E-commerce Storefront (Solo)

- Live e-commerce platform for tech gadgets in Northern Ghana. NestJS, Next.js, PostgreSQL, Redis, Docker, Paystack. Event-ledger webhook handler for idempotent payment processing with transactional state transitions — zero reconciliation errors since launch.

ImportBrain — Multi-Tenant SaaS for Ghanaian Importers (In Development)

- Multi-tenant import workflow tool with tenant isolation. Stack: NestJS, Next.js, Prisma, PostgreSQL, Redis, Docker for local development.

SKILLS

Languages: PHP 8, TypeScript, JavaScript, Java, Kotlin, Python

Backend: Laravel, PHP, Node.js (Express, NestJS), Spring Boot, FastAPI

Databases: MySQL, PostgreSQL, MongoDB, Redis; Eloquent ORM, Prisma, Hibernate, Flyway

Search & Data: OpenAI embeddings, hybrid semantic + lexical search, delta-sync pipelines, three-way merges, idempotent upserts, large-dataset query optimization

Integrations: Stripe Connect (marketplace transfers, webhooks, idempotency), Paystack, Contentful, Google Places, CRM bidirectional sync, third-party APIs

Frontend: React (function components, hooks), Next.js (App Router, Server Components), Tailwind CSS

Testing: PHPUnit / Pest, Jest, Supertest, JUnit, Mockito

Messaging & Realtime: Apache Kafka, RabbitMQ, WebSockets, Server-Sent Events

Infrastructure & CI/CD: Docker, GitHub Actions, Linux server administration, safe DB migrations with backups, Git-based deployment workflows, AWS, Hetzner, Railway

Architecture: Multi-tenant SaaS, REST APIs, Microservices, Distributed Systems, Event-Driven Design, Queue-based processing with retries and locking

EDUCATION

University of Energy and Natural Resources

Sunyani, Ghana

B.Sc. Computer Engineering · 2016 – 2020