

Hamza Belgacem

Freelance Full-Stack Developer · AI Specialist

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linkedin.com/in/hamza-belgacem-7a061617a github.com/hamzajapan ● Available for new projects

● PROFILE

Full-stack engineer who ships **complete production platforms solo**, from architecture to a live server. In 2026 alone: **six platforms in production** across logistics, edtech, agritech, home services, delivery and certification. Deep, hands-on **AI integration**: LLM assistants with RAG, 24/7 voice agents, vision-based grading of handwritten documents, multi-model cost routing. I build products in **Arabic, French and English**, including native right-to-left interfaces, and I run them myself on production Linux infrastructure. Technology in service of people, not the other way around.

6

platforms live in 2026

100%

solo, end-to-end delivery

3

product languages
(AR-FR-EN, RTL)

AI

voice · vision · RAG in
production

● SELECTED PRODUCTION WORK

Paxos Systems

AI VOICE

2026 · paxosystems.com

- Built an **AI phone agent** (Vapi + Twilio) answering 24/7 for HVAC businesses: job qualification, appointment booking, instant missed-call SMS recovery; every completed call logged as an actionable lead.
- Delivered programmatic SEO (city pages, llms.txt, IndexNow), a two-tier operations console with pipeline mini-CRM, first-party A/B and referral attribution: **86 views, 20 models, 24 migrations** (Laravel 11, PHP 8.2).

Étude

AI EDTECH · FOUNDER

2026 · etude.cam

- AI tutor covering **100% of Tunisia's official curriculum**: 3 school levels, 29 subjects, 500+ lessons; six Claude-powered workflows including adaptive placement and **photo-based grading of handwritten homework** against official 20-point rubrics.
- Offline-capable Next.js 16 PWA; per-subject language discipline (physics in French, formal Arabic elsewhere); prompt caching for predictable AI costs.

Khir Tounès

MARKETPLACE

2026 · khirtounes.tn

- Farm-to-table national marketplace: **3,600+ products, ~1,240 farmers**, interactive Leaflet map of all 24 governorates; payments by card, e-Dinar, D17 and cash on delivery.
- Consent-first AI farmer onboarding (zero scraping) and a provider-agnostic gateway routing tasks across **four Claude model tiers** by cost; native-RTL Arabic design system (Next.js 16, React 19, Prisma).

FSL Cargo

LOGISTICS

2026 · fsl-cargo.com

- Freight platform for a London forwarder: **live AIS vessel tracking** to the nautical mile across **64 ports and 8 trade lanes**, with real sea-lane Dijkstra routing (Node.js, Express, Datalastic).
- Multi-team operations console with role-based access and two-factor authentication; sanitized external data pipeline.

- Delivery super-app for Greater Tunis: **four coordinated apps** (customer, courier PWA, restaurant, admin) on a **zero-dependency Node.js backend**, ~30 REST endpoints, Server-Sent Events realtime at **~4 ms**.
- Hand-built Web Mercator map engine with cached OSM tiles for GPS tracking; phone OTP auth; Konnect payments; server-enforced fair courier pay (haversine); bilingual AR/FR RTL interface.

SGS Brazil

CERTIFICATION

2026 · sgs-brazil.com

- Tamper-evident certificate system: dual random codes plus **deterministic SHA-256 seals** with print locking; public online verification of 14 data fields; 5-section admin console.
- Legacy platform rescue: recovered 260 missing code-split chunks, mapped 876 URLs, built a self-healing asset layer behind Nginx.

hamzabelgacem.com

OWN PLATFORM

2026 · hamzabelgacem.com

- My own bilingual portfolio with an AI back office: a **24/7 opportunity radar** scanning freelance sources and scoring leads with Claude, AI email triage over IMAP/SMTP with drafted replies, and instant Telegram alerts.

SKILLS

AI & LLM

Claude API (multi-model routing), OpenAI, RAG pipelines, voice agents (Vapi), vision extraction & grading, prompt caching, cost control, guardrails

Backend

Node.js (incl. zero-dependency builds), Express, Laravel 11 / PHP 8.2, REST APIs, SSE realtime, state machines, webhooks

Integrations

Twilio SMS, Vapi voice, Konnect / e-Dinar / D17 payments, Leaflet / OpenStreetMap, Datalastic AIS, IMAP/SMTP, Telegram bots

Frontend

React 19, Next.js 15/16, TypeScript, Tailwind CSS 4, PWA & offline, i18n / RTL (AR·FR·EN), KaTeX, design systems (OKLCH tokens)

Data

PostgreSQL, Prisma, SQLite, data modeling, migrations, external feeds sanitization (AIS, OSM)

DevOps & Security

Linux VPS, PM2, Nginx, TLS, systemd, multi-site hosting; JWT, 2FA, RBAC, SHA-256 sealing, honeypots & rate limiting; programmatic SEO, IndexNow

LANGUAGES

Arabic — native

French — fluent

English — professional

Every line above is verifiable. Each delivered platform hosts a signed, unlinked proof-of-ownership page documenting the build (stack, dates, engineering decisions). Verification links and references available on request, and on each case study at hamzabelgacem.com/en/projects.