

David Abraham Aguilar

Full-Stack Developer · Server Architect

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PROFILE

Full-stack developer and server architect. I ship working software fast and prove it with tests and monitoring: a working Shopify migration kit in one afternoon, deployed on infrastructure I run myself. I own the whole cycle: build, deploy, watch it in production. I ran construction and housing companies for over ten years, so I work to deadlines and budgets; in April 2025 I stepped back from the construction company I founded, staying on as owner, to build technology full time.

< 3 h

first commit to production release of the Shopify kit (wall clock)

1–7 h

to ship a complete PWA, the same day, often from a mockup or template

58

Docker containers running on servers I manage

118

Playwright scripts across two QA harnesses

BUILT FOR THIS ROLE · OCTOBER 2026

Embed Migration Kit · Shopify app

Oct 10, 2026

- Moves storefront integrations from script tags to theme app embeds and Markets price lists. Built with my AI-agent workflow. **First time on Shopify.**
- From first commit to production release in **under 3 hours** of wall-clock time (Oct 10, 2:35 → 5:14 pm), after a day of research on the 2026 docs, staff threads and CLI issues. Runs in Docker on my own server.
 - **Measure, activate, verify, remove**, store by store: it scans every theme for legacy currency code with file and line, opens the activation by theme ID, and waits for three signals (theme settings, app.extensions() and a storefront beacon) before a queue with backoff removes anything.
 - Live proof on a development store: Shopify refuses a new script tag on API 2026-10, 2026-01 and 2025-10 (“This app can't create or update script tags. Use theme app extensions instead.”).
 - **Prices by country to Markets price lists**: a product in Mexico went from 16,558 MXN converted to a fixed 15,999 MXN, audited with contextualPricing; the old per-country variant alone showed 299,006 MXN. Batches of up to 250, idempotent.
 - **12/12 unit tests**, expiring offline tokens (ready for January 1, 2027) and no theme-write permission.

HOW I WORK FAST

- **Infrastructure ready on day one.** 58 containers and 34 public hostnames on 2 domains behind one reverse proxy with automatic HTTPS; my demo mold creates an isolated app (subdomain, HTTPS, daily backups) with one command. 48 alert rules loaded in Prometheus, a weekly vulnerability scan and backup restore tests.
- **Tests against the real thing.** 118 Playwright scripts in two QA harnesses; demos are checked in three browser engines before they are published.
- **Tools I build for myself, every week.** 22 scripts for my working method (case files, dashboards generated from plain text, hours per session) and 11 written playbooks for recurring jobs: demo deploys, weekly reports, server maintenance, research.
- **Guardrails that keep speed safe.** Hooks stop known mistakes before they run; images are built without cache and checked against the tested code before going live; a weekly log checks every change against git and the database.
- **AI agents under a written method.** I direct, decide and verify; agents execute in phases with approval gates.

SOFTWARE EXPERIENCE

Full-Stack Developer and Server Architect (freelance)

2025 – present

Mérida, remote · End-to-end projects for clients in Mexico and the United States: architecture, code, testing, deployment and operations.

Arca Tierra

Jun 2025 – present

Agroecological e-commerce and farm experiences · Mexico City · arcatierra.dabychos.com

- Complete platform: online store, subscriptions, experience bookings and admin panel. **Next.js 15 + TypeScript** (82 screens) and a **FastAPI** API (266 operations, 49 router modules) on **PostgreSQL** (69 tables).
- **MercadoPago** payments: one-time charges, recurring subscriptions and HMAC-signed idempotent webhooks. Prices locked at booking time, coupons and reseller commissions.
- Admin panel with role-based permissions (6 roles, 29 permissions; 178 endpoints check a role, no role = denied), transactional email, PDF quotes and Excel reports.
- Quality: **597 browser checks** with Playwright and **1,115 backend checks** in 49 suites, zero failures (last full run, October 3, 2026). Disposable staging and daily backups with tested restores.

SKILLS

Intermediate Advanced

Levels based on shipped production work

Shopify (since October 2026)

Admin GraphQL API	Intermediate
Theme app extensions · app embeds	Intermediate
Markets · catalogs · price lists	Intermediate
Shopify CLI · app deploy	Intermediate

Frontend

Next.js · React · TypeScript	Advanced
HTML, CSS, Tailwind, responsive design	Advanced
PWA and offline mode	Advanced
Web games: Canvas 2D, JavaScript	Advanced
Charts: D3.js, Chart.js, Recharts	Intermediate

Quality and automation

End-to-end testing (Playwright)	Advanced
AI-assisted development (Claude Code)	Advanced
Load testing	Intermediate
Automation: n8n, Make.com, WhatsApp	Intermediate
Web scraping and Google Maps API	Intermediate
RAG and local models: pgvector, Ollama	Intermediate

Management

Phase-based project management	Advanced
Documentation and user manuals	Advanced
Business management and finance	Advanced

Architecture and servers

Docker and Docker Compose	Advanced
Linux (Ubuntu Server)	Intermediate
Traefik, HTTPS, Cloudflare	Intermediate
Proxmox VE, VMs/LXC, WireGuard	Intermediate
Monitoring: Prometheus, Grafana	Intermediate
Backups and recovery	Intermediate
Application security	Intermediate
CI/CD (GitHub Actions)	Intermediate

Backend

Python · FastAPI	Advanced
PostgreSQL: design, SQL, concurrency	Advanced
REST APIs, JWT, OAuth, permissions	Advanced
Payments: MercadoPago and webhooks	Advanced
Node.js · Express	Intermediate
Django	Intermediate
Redis	Intermediate
Supabase, Firebase, SQLite	Intermediate

IoT and embedded systems

ESP32 · Arduino · sensors	Intermediate
Home Assistant, ESPHome, Zigbee	Intermediate
C, C++, C#, Java	Intermediate

OTHER SOFTWARE PROJECTS

2026	PX Sports · D10S Invaders · Video game for the Maradona Vive museum (Dolphin Mall, Miami) · d10s.estom.mx · Deterministic Canvas 2D engine with replay-verified scores; FastAPI + PostgreSQL + Redis leaderboard; load test of 400 games, 40 concurrent, 0 errors, p95 143 ms.
2026	E-STOM · Online arcade · Retro video game portal · estom.mx · 4 games in production, single sign-on across subdomains, weighted leaderboards, offline arcade cabinet.
2026	Messy Tables · PWA for wedding planners · Mexico City · React 19 + Vite with a FastAPI API (182 routes); works offline on the wedding day; bilingual EN/ES.
2019	Bosqua · Smart homes · 49 homes, 45% green space · I modeled the whole development in Unreal Engine as an interactive walkthrough that buyers toured online, and it drove the sales. I designed and programmed the automation of every home on Zigbee: voice control of lights, fans, A/C and TV, even a specific Netflix episode.

OTHER EXPERIENCE

2014 – present	Business leadership · Bosqua S.A. de C.V., smart eco-friendly gated community I designed in 2019 (majority partner and General Manager, 2020 – present; I personally sold 60% of it) and Urbex Constructora (founder and owner; General Manager 2014 – Apr 2025)
2011 – 2013	Advanced Consulting Solutions · New Technologies Developer
2010 – 2014	Mathematics teaching · Instituto Patria (high school) and Universidad Patria

EDUCATION

B.Eng. in Mechatronics Engineering
Universidad Anáhuac Mayab · 2006 – 2011
Master's in Construction Business Management
Universidad Marista de Mérida · 2013 – 2015
High school year abroad
Bonar Law Memorial High School, Rexton, Canada · 2003 – 2004

AWARDS

3rd place, Yucatán state round of the 16th Mexican Mathematical Olympiad.
Organizer of the 1st National Mechatronics Engineering Congress, Anáhuac Mayab (2007).

LANGUAGES

Spanish Native
English Advanced

ONLINE

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