

JAVIER GONZÁLEZ ESTARRIOL

Senior Backend / Full-Stack Developer · Python, Node.js, PostgreSQL,
MongoDB and AWS in high-volume production



Portfolio

jgestarriol@gmail.com · +34 630 45 73 81 · Astorga (León), Spain

jgestarriol.com · linkedin.com/in/javier-gonzález-estarrinol · github.com/TelasGonzas

01 PROFESSIONAL SUMMARY

Senior Developer with 3 years building and running high-volume production systems, after years of freelance web development: a ~265k-line Python ERP/WMS (Flask, SQLAlchemy, PostgreSQL) with ~1,560 tests, and a Node.js/MongoDB middleware integrated with Shopify and 4 carriers. Full cycle: APIs and data models, concurrency (locks, queues, idempotency), performance, AWS deployment and incident response. I use AI agents with tests and CI as the verification layer.

02 KEY ACHIEVEMENTS

~265k

lines of Python in the ERP/WMS,
with ~1,560 automated tests

1,300+

commits in 2026, 95% of the main
repository

10 h → 3.5 h

Shopify shipment-status backfill
after parallelizing it

99.9%

orders fulfilled after our own WMS
went live

03 PROFESSIONAL EXPERIENCE

Senior Developer · Tech & AI Innovation Lead · DIVAIN TEAM S.L.

11/2023 – present · Astorga (León), Spain

Junior Developer · 11 months → Senior Developer · 10 months → current role since 08/2025

E-commerce fragrance brand with its own factory and warehouse: online sales in Europe, the UK and Mexico, retail stores, marketplaces and 3PLs. I coordinate automation, machinery and transport vendors.

IN-HOUSE ERP/WMS

- **Lead developer of the in-house ERP/WMS**, from purchasing to returns: ~265k lines of Python (Flask, SQLAlchemy, PostgreSQL), ~800 endpoints, 42 scheduled jobs, ~1,560 tests and 95% of 2026 commits.
- **Took our own order management live** (March 2026) on top of a third-party pick-to-light system: pre-allocation with stock reservations, shuttle buffer, scan validation (GS1-128, DataMatrix, SGTIN-96), automatic labels and Shopify fulfillment.
- **APIs and concurrency**: Flask-RESTX v2 API with API keys, HMAC-verified Shopify webhooks, per-order locks against double reservations, retry de-duplication in the stock ledger and real-time events with Socket.IO over Redis.
- **Real-time SLA board** on the shop floor, with voice alerts, used by supervisors to allocate staff across picking, bottling and labeling; average order-prep time fell 90% from 2025 to 2026.
- **Purchasing and automatic materials-consumption module**: POs, scanner-based receiving, lots, stock ledger (kardex), valued inventory (WAC/FIFO), three-way match and min-stock auto-replenishment; the bill of materials deducts bottles, caps, boxes and flyers at bottling, labeling and shipping.

LOGISTICS, CARRIERS AND POST-SALE

- **Node.js and MongoDB shipping middleware**: labels and tracking for 4 domestic and international carriers, pickup points included, with automatic cheapest-rate selection including surcharges, which lowered logistics cost.
- **Automated audits that surface money**: a carrier-invoice comparator that checks every invoice against actual shipments and lists claimable discrepancies, and a refund review that uncovered overpayments, now blocked by an automatic rule.
- **Automated returns**: multi-carrier return labels, auto-refund 72 h after drop-off, 12-month store credit through a Shopify Customer Account extension in 13 languages, and an anti-abuse blacklist fed by warehouse inspection.
- **In-house shipment tracking replacing a SaaS**: normalized statuses, estimated delivery dates, stalled-shipment detection and proactive multilingual emails; API for customer service and webhooks for the mobile app.

INFRASTRUCTURE, RELIABILITY AND SECURITY

- I run production on **AWS EC2 (Ubuntu)**: nginx, uWSGI, Supervisor, PM2 (8 Node.js services), Docker (PostgreSQL 16, Redis 7, MongoDB 7), ZeroTier VPN to the plant and CloudWatch, UptimeRobot and Zabbix; 2 servers, 15+ services.
- Unblocked a promo with thousands of pending orders (1 min per validation) over one weekend: multiple workers, Redis locks and Socket.IO sticky sessions. Also removed N+1 queries, added indexes and cut a backfill from 10 h to 3–4 h.
- Production incident management (memory exhaustion, webhook timeouts, VPN drops) with no lost orders: log-driven diagnosis, deploy and rollback runbooks, backups and dry-run data-fix scripts.
- Security: code audits that closed an unauthenticated API and secrets in the repository; HMAC webhooks, API keys and rate limiting; RLS audits of other teams' Supabase apps and a GDPR audit of the storefront.
- Quality: GitHub Actions CI (ruff, smoke tests and a docs-drift check), safe Alembic migrations and PR-based branches: 1 revert in 426 commits in Q3 2026. Removed ~500k lines of dead code without regressions.

SHOP-FLOOR AUTOMATION AND HARDWARE INTEGRATION

- **UHF RFID traceability:** dock portal with 3 antennas, an SGTIN-96 tag per bottle and parcel-pallet-order linking, used to claim lost parcels from carriers and log returns arrivals.
- **Shipment validation and sorting v2.0:** kiosk-mode parcel-to-pallet scanning by zone and carrier, self-printing ZPL pallet labels, RFID-confirmed dispatch and multi-parcel labels read by the sorter.
- Pick-to-light replenishment with **wearable scanners** (Windows HID and WebSocket bridges): cartridge transit window cut from 15 to 3 minutes.
- Integrated a **robot arm** with the labeling machines: it loads perfumes into cartridges and links each one to its cartridge, running two machines with different products in parallel, so warehouse staff no longer scan by hand.

DATA, AI AND PLANNING

- **AI analytics assistant** inside the ERP: tool-calling LLM over PostgreSQL in read-only transactions, PII masking, blocked tables and per-query cost limits; produces PDF and Excel reports.
- **AI-assisted engineering with guardrails:** custom Cursor agents, rules and hooks (verifier loops, plan before implementing, tests first) with CI as the quality gate.

EARLIER PROJECTS (2023-2025)

- Perfume-equivalence widget in 7 languages with price per 100 ml, geo-redirecting dynamic QR codes for ~1,700 products, Shopify stock sync and product labels (DataMatrix, EAN-13, ZPL).

Freelance Full-Stack Developer · Investment holding (client)

01/2026 – present · Remote

- **Holding corporate website** (Next.js 16 on Vercel): lead capture into Supabase with private attachments and signed URLs, /admin panel, anti-spam (Turnstile, honeypot and rate limiting) and a security, cookie and GDPR audit.
- **Real-estate co-investment tracker:** deal extraction from Discord, scoring classifier validated by backtest (92 → 39 deals flagged to invest), insights page, 72 tests and RLS on 13 Supabase tables (tRPC, Drizzle).
- **M&A marketplace SaaS** (pnpm monorepo with Next.js and Supabase): app/web split via middleware, DNS and Vercel deployment.

Supervisor · Grupo Dani García (restaurants)

05/2023 – 11/2023

Chef de Rang · Grupo Dani García (restaurants)

09/2019 – 04/2023

Freelance Web Developer · alongside hospitality work

2014 – 2019

Waiter · Casa Maragata

04/2014 – 08/2019

04 TECHNICAL SKILLS

Languages: Python, JavaScript (Node.js), TypeScript, SQL, HTML/CSS, Jinja, Liquid and ZPL

Backend and APIs: Flask (SQLAlchemy, Alembic, Flask-RESTX, Socket.IO, APScheduler), Express, Next.js, tRPC; REST, SOAP, SFTP, HMAC webhooks, idempotency

Frontend and testing: React (Redux), Vue.js, Angular, HTML/CSS/Sass; pytest, Jest, Mocha and Jasmine

Data: PostgreSQL 16 (indexing, locking, transactions), MongoDB, Redis, Supabase (RLS), pandas and NumPy

Infrastructure: AWS EC2, Linux (Ubuntu), nginx, uWSGI, Supervisor, PM2, Docker, ZeroTier, GitHub Actions, CloudWatch, UptimeRobot

Integrations: Shopify (Admin REST/GraphQL, webhooks, Customer Account UI Extensions), carrier APIs, marketplaces and 3PLs

Applied AI: tool-calling LLMs with SQL guardrails; Cursor and Claude Code (agents, rules, hooks and verifier loops)

Warehouse hardware: UHF RFID (SGTIN-96), wearable scanners, vertical lift module (VLM), robot arm, pick-to-light, sorter, thermal printers (ZPL)

Domain: WMS, picking and pre-allocation, replenishment, ABC slotting, stock ledger, BOM, GS1 traceability, reverse logistics, SLA

05 SOFT SKILLS

Problem solving under pressure · Ownership and autonomy · Continuous learning and adaptability · Business and executive communication · Results orientation · End-user empathy

06 EDUCATION

Full-Stack Development Bootcamp · ISDI Coders · 04/2023 – 07/2023

Higher Technician Diploma in Multiplatform Application Development (DAM) · CFP María Auxiliadora · 09/2012 – 04/2014

Computer Engineering (not completed) · University of León · 2011 – 2012

07 LANGUAGES

Spanish: native · English: advanced (full professional proficiency)