

GERARDO GALAN GARZAFOX

FullStack Software Engineer | Monterrey, Mexico

<https://github.com/gggfox> | gerardogalangarzafox@gmail.com | +52 (811) 490-6208

<https://linkedin.com/in/gerardo-galan-garzafox>

PROFESSIONAL WORK EXPERIENCE

Forward Deployed Engineer - Automat (YC company)

July 2025 - Present

- Owned end to end RPA that eliminated 63.2 hours/month of manual clicking for a mortgage customer and uploaded 3,864 documents/month to a customer portal. Orchestrating document retrieval across 7 structurally distinct lender portals, replacing an n8n automation. Used 1Password SDK for credential injection, HTML/CSS locators with LLM self-healing as a fallback for DOM drift, indexing from PDF embedded metadata.
- Eliminated 126 hours/month of manual processing for a healthcare customer with a Typescript/Playwright RPA that filters a tenant's patient records and extracts key data points. Autoscalable workers pulled from a Temporal Cloud task queue for durable execution, shipped via Github CI/CD to a HIPAA-scoped GCP environment.

Senior Software Engineer - Umbrage (part of Bain & Company)

April 2022 - July 2025

- Served as frontend tech lead for 11 engineers on Sevenly, a React Native/Expo cashback app for Grupo Iconn (7-Eleven MX) now past 410,000 downloads in Google Play Store. Kept the team shipping against a nonexistent API with an endpoint mocking toolkit covering response bodies, errors states, and timeouts, built after Metro bundling of MSW interceptors made MSW unusable. QA later adopted it.
- Cut xlsx report generation from 50s to 5s on a Nest.js GraphQL endpoint whose Excel downloads were failing outright. Traced it to requests exceeding the AWS ALB idle timeout, and replaced in-memory workbook buffering with Node.js streams. This bug was affecting all 9 customer intelligence dashboards in Bain Pyxis which was a key feature for all users.

PERSONAL PROJECTS

Tavli

- Developed the tool calling layer behind an OpenRouter LLM agent that lets diners manage real booking over Whatsapp (Twilio) in natural language. Because the agent mutates real bookings, authorisation resolves from the channel verified sender outside the tool arguments, never from a model supplied reservation ID. Destructive tools require an OTP confirmation generated by trusted code outside the model output path.
- Built a multi-tenant marketplace on Stripe Connect between restaurants and diners. Destination charges with each restaurant as merchant of record, idempotency keys derived from payment row ID rather than generated per call, to avoid double charge a diner. Reconciliation of stale Convex DB rows with stripe hanging webhooks. Kitchen staff don't see customer orders in the dashboard until a completed payment triggers a webhook.

Mini-Convex

- Implemented a Rust $\Leftrightarrow$ Javascript execution boundary based on Convex internals. Embedded V8 via Deno's core API (deno_core) to run user defined function (UDFs) inside a V8 isolate exposing read/write operations on a Rust BTreeMap through custom syscall registered through deno_core extension. Loaded UDFs as ES modules, then executed the process through a Tokio runtime.

SKILLS

Languages: TypeScript | JavaScript | Rust

Frontend: React | Tanstack | Next.js | Zustand | Redux | Svelte | Expo | React Native | TailwindCSS | HTML | CSS

Backend: Node.js | Express.js | Nest.js | Zod | RDBMS | REST API | GraphQL | Redis | Stripe | OpenRouter | Twilio

Automation & Infra: Github | CI/CD | Docker | Playwright | GCP | AWS | Temporal | Doppler | Linux | MCP

EDUCATION

B.S.Computer Science, Tecnológico de Monterrey, Campus Monterrey - 2021

(GPA: 91/100)