

JESÚS TORRES

Senior Backend Engineer | Blockchain & Distributed Systems

Bogotá, Colombia | Open to international remote roles
jesust07@gmail.com | +57 321 385 7986
jatv.dev | gitlab.com/JTOpenSource | swapstracker.com | LinkedIn

PROFILE

Senior backend engineer specializing in **blockchain infrastructure, performance optimization and resource efficiency**. Builds EVM indexing, on-chain analytics and backend services in **Go, TypeScript and Python**. Combines an electrical engineering background with experience in GPU-accelerated data processing, native SQL and concurrent pipelines, guided by measurable results and operational traceability.

EXPERIENCE

Senior Backend Developer

Manizales Shared Services
Nov 2024 – May 2026 | Manizales, Colombia

- Automated daily insurance policy and claims ingestion with **Python, Prefect and SQLAlchemy** ETL workflows.
- Delivered **Stripe and PayPal** payment integrations with MongoDB-backed event deduplication for webhook redeliveries.
- Built centralized authentication with **RS256 JWTs**, JWKS key rotation and Google OAuth 2.0 integration.
- Developed transactional email and SMS delivery through AWS, third-party providers and SMTP, plus an **end-to-end test harness** for distributed services.

CEO & Senior Backend Developer

SalamandraDevs
Mar 2022 – Sep 2024 | Manizales, Colombia

- Designed and delivered DeFi backend services using **TypeScript, Web3 and MongoDB** for on-chain data processing.
- Reduced API response times by **30%** through REST API design improvements for cryptocurrency auditing integrations.
- Managed **Docker and GitLab CI/CD** deployments for production services with **99.9% availability**.
- Automated industrial robotic-control workflows with Python and MATLAB.

Blockchain & Automation Developer

BSCLOWTAX – Freelance
2019 – 2023 | Remote

- Built **Chainstream**, an Ethereum and BSC data extraction platform using TypeScript, Web3.js and Redis caching for on-chain analytics.
- Deployed Telegram AI and token-analysis bots, including IABOT and WolfyBot, delivering real-time alerts to **1,000+ active users**.

EDUCATION

B.Sc. Electrical Engineering 2015

Universidad Distrital Francisco José de Caldas

Electrical Technologist 2011

Universidad Distrital Francisco José de Caldas

Meritorious theses in electromagnetic shielding and image processing for mobile robot path planning, using MATLAB.

FLAGSHIP PLATFORM

Swapstracker

swapstracker.com | Production; proprietary
Go, TimescaleDB, PostgreSQL, Redis, WebSockets, Svelte, SvelteKit

- Completed a two-year backfill for both chains in **20 days** versus an initial **one-year estimate**, rewriting my original TypeScript microservices as a single **Go binary** and migrating MongoDB to TimescaleDB; reduced RAM usage by **80%**.
- Indexed **3.1+ billion trades** across two EVM chains on a **Radxa ROCK 5C SBC** also hosting HabitsFlow and GroupBrain, storing the history in **1 TB of compressed storage**.
- Delivered low-latency OHLCV queries using **TimescaleDB continuous aggregates** and **singleflight** request deduplication, with Redis Pub/Sub for live trade streaming.

TECHNICAL SKILLS

Languages

Go (Golang), TypeScript, Python, SQL, JavaScript

Backend & concurrency

REST APIs, goroutines, worker pools, context cancellation, Redis Streams, WebSockets, retries, idempotency

Architecture & data

Ports & Adapters, microservices, PostgreSQL, TimescaleDB, MongoDB, Redis, pgx, SQL migrations

Security

JWT RS256, JWKS, OAuth 2.0, RBAC, TOTP/MFA, Argon2id, AES-GCM

Delivery & testing

Docker, GitLab CI/CD, Linux, Cloudflare Tunnel, integration testing, Testcontainers

Product technologies

EVM, Foundry Anvil, SvelteKit, ChromaDB, retrieval-augmented generation (RAG)

Languages: Spanish (native), English.

SELECTED PROJECTS

Gatekeeper – Delegated API Access & Credential Proxy

GitLab: [JTOpenSource/tools/Gatekeeper](#)

TypeScript, Express, MongoDB, Redis

- Built a gateway that delegates access to third-party APIs through **per-user provider permissions**, keeping upstream credentials server-side and out of consuming applications.
- Centralized access management with **RBAC**, TOTP-protected administration and Redis-backed session revocation.

w3contractauditor – EVM Risk Analysis

GitLab: [JTOpenSource/web3automation/w3contractauditor](#)

TypeScript, Foundry Anvil, EVM, TimescaleDB

- Built buy/sell simulations on forked EVM state to detect honeypot behavior and measure token transfer taxes.
- Reused **persistent Anvil daemons** for latest-state simulations, with mutex-protected snapshots and reverts to isolate requests and avoid repeated process startup.
- Orchestrated simulation, bytecode analysis and market-data retrieval concurrently, combining results with early-trader and holder analysis.

HabitsFlow – Cyclic Scheduling Platform

[habits.jatv.dev](#) | Backend | Frontend

Go, net/http, PostgreSQL, pgx/v5, SvelteKit

- Built a Go REST API with **native PostgreSQL connection pooling**, explicit SQL and versioned migrations; integrated external RS256 authentication.
- Modeled recurring schedules across **four habit disciplines**, supporting cyclic, daily, weekday and interval schedules, calendar shifts and community routine cloning.
- Separated scheduling logic from persistence and HTTP handlers, with unit tests for cycle and pause behavior.

GroupBrain (tgbrainbot) – Telegram Memory

[brain.jatv.dev](#) | GitLab: [tgbrainbot](#)

Python, MongoDB, ChromaDB, Svelte

- Built hierarchical **RAG** combining conversation logs, topic summaries and vector retrieval for chat history and documents.
- Implemented AES-256-GCM encryption for stored messages with **HKDF-derived user/group keys**, alongside multi-provider LLM failover and asynchronous reminders.

SHARED INFRASTRUCTURE

JTOpenSource Microservices

[gitlab.com/JTOpenSource/microservices](#)

Go, MongoDB, Redis, Docker

Developed reusable services with explicit domain boundaries and infrastructure adapters.

- **Auth:** RS256/JWKS key rotation, TOTP, Argon2id and Redis session allowlists.
- **Payments:** Stripe/PayPal adapters, web-hook deduplication and scheduled reconciliation.
- **Notify:** Redis Streams consumer groups, Go worker pools, pending-message recovery and dead-letter handling.
- **Docs:** GridFS binary storage and Testcontainers integration tests.
- **Gateway:** Edge routing, rate limiting and CORS policies.

Core Libraries – golib & tslib

[gitlab.com/JTOpenSource/corelibs](#)

Go, TypeScript, Ports & Adapters

- Centralized shared contracts and adapters for logging, authentication, encryption and storage across backend services.
- Implemented reusable HTTP clients with retries and backoff, plus interchangeable Redis, MongoDB and cryptographic adapters.

ENGINEERING BACKGROUND

Developed **GPU-accelerated Python software** for power-quality data analysis at an engineering company co-founded with a colleague. Also built the company's website.

SELECTED PUBLICATIONS

Magnetic shielding of conductive materials

Ciencia en Desarrollo

Image processing for mobile robot path planning

Redes de Ingeniería

PROFESSIONAL DEVELOPMENT

Neural Networks and Deep Learning – Coursera

Software Development – Google Activate