

Gil Lopes Bueno · Backend Engineer · Sao Paulo, Brazil (UTC-3)

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I am a Software Engineer with 19+ years delivering scalable backend systems, distributed applications and enterprise software, with 50+ projects across logistics, fintech, media, enterprise SaaS and Web3. I architected a logistics platform processing 50M+ invoices for 60,000 couriers, and a wallet that moved over \$1 billion in volume.

My core expertise is Java, Kotlin, Node.js and TypeScript — REST and GraphQL APIs, distributed systems, and solution architecture. I've led engineering teams of up to 30 while staying hands-on in design and implementation, defining architecture, roadmaps, and engineering standards.

More recently I've worked on AI-assisted engineering workflows — integrating LLM agents into development and review, and building tooling that turns natural language into working software — plus Web3 applications: backend services, wallet infrastructure, and multi-chain integrations. What I care about is shipping systems that stay reliable in production.

Notable Achievements

- Neon Wallet – US\$1B+ in traded volume
- iTrack – 50M invoices; 60k couriers; 2k companies
- Sharity – R\$2M in donations; 100k users
- Multilaser Runin – Embedded in 20M+ devices
- Apptite – US\$1.6M GMV; 100k orders; 50k users
- Desabafa – 700k posts

Skills

BACKEND: Java (2008-2024), Kotlin (2016-2024), Node.js (2012-2025), TypeScript (2016-now), REST (2012-now), GraphQL (2021-2024), WebSockets (2016-2025), Microservices (2019-now), MySQL (2013-2024), PostgreSQL (2013-2025), NoSQL (2018-now), Prisma (2021-2025), Distributed Systems (2019-now), Solution Architecture (2016-2025), Redis (2015-2024), Docker (2016-now), AWS (2013-2025), ECS (2016-2025), S3 (2015-2025), SNS (2015-2025), SQS (2015-2025), Terraform (2019-2025), CI/CD (2018-now), GitHub Actions (2020-now), C# (2018-2024), Python (2018-now), Express (2012-now), Jersey (2020-2023), Elasticsearch (2019-2025)

WEB FRONTEND: JavaScript (2008-now), TypeScript (2016-now), React.js (2016-now), Next.js (2021-now), Tailwind (2020-2025), SvelteKit (2023-2024), Chakra UI (2020-2023), React Query (2021-2025), Redux Toolkit (2021-2024), ECharts (2019-2025), Valtio (2023-2025), Vite (2022-2025), Jest (2018-2025), Playwright (2023-2024), Storybook (2020-2024), React Hook Form (2020-2023)

AI ENGINEERING: AI Process Automation (2025-now), Agent Development (2025-now), MCP (2025-now), Claude Skills (2025-now), Harness Engineering (2026-now), Spec-Driven Development (2025-now), Claude (2025-now), Anthropic API (2025-now), OpenAI API (2023-now), Claude Code (2025-now), Cursor (2024-now), Context Engineering (2025-now), Agentic Workflows (2025-now), Evals (2025-now), RAG (2024-now)

WEB3: Ethereum (2020-now), EVM (2020-now), Multi-chain Integration (2018-2024), Wallet Infrastructure (2021-2025), WalletConnect (2021-2024), Ethers (2021-2025), Wagmi (2023-now), Viem (2024-now), The Graph (2023-2025), Solidity (2020-now), Hardhat (2020-now), Foundry (2025-now), SDK Development (2022-2024), Cryptography (2023-2025), Account Abstraction (2024-2025), Solana (2021-2025), Flow (2022-2023), Neo N3 (2021-2024), Automated Testing (2020-now), Audit Prep (2023-now)

LANGUAGES: English (C2), Portuguese (Native)

Work Experience

33Labs • Software Engineer • Sep 2025 - current

At 33Labs (formerly 33Audits), I've designed and implemented scalable backend services and application architecture for decentralized financial products.

The company began as a security auditing firm, which has given me daily experience preventing vulnerabilities in production systems. I've worked end to end — architecture, implementation, and automated testing — with security engineers involved throughout. This led me to a key conviction: review should start at the architecture stage, before any code is written. To support it, I built developer tooling and AI-assisted workflows that improved the team's productivity.

Tech: Solidity, Foundry, Ethereum, EVM, System Architecture, AI Tooling, REST · <https://www.33labs.ai/>

COZ • Director | Tech Lead • Jun 2022 - Feb 2023

COZ is the first and most well-known group of developers on the Neo network, renowned for numerous significant projects within the ecosystem. After years of partnership, I was honored to be invited to join the group's board of directors.

Tech: Blockchain, Web3 · <https://coz.io/>

Simpli • Co-founder | Software Engineer | CTO • Oct 2013 - May 2025

I co-founded Simpli and, over 11 years, led engineering teams of up to 30 developers, including 5 team leads, and delivered 50+ production software projects — distributed enterprise systems for logistics, fintech, media, education and SaaS clients, plus our own proprietary platforms. I defined software architecture, technical roadmaps, engineering standards and delivery processes, and built scalable backend services using Java, Kotlin, Node.js, TypeScript, MySQL/PostgreSQL and REST/GraphQL APIs.

We started Simpli as a two-person startup building a B2C mobile product and pivoted within its first year into a software house delivering custom distributed applications, scaling organically through consistent delivery and client satisfaction. I played a key role in shaping both the technical direction and the business strategy, ranging from hands-on technical leadership to driving innovation through research, process design and early adoption of emerging technologies such as mobile and blockchain.

Provisioning AWS infrastructure was a recurring part of that work. Across 50+ projects, I standardized it: a checklist for spinning up new accounts, a baseline set of IAM roles, and a reusable Terraform starter kit so no project's infrastructure started from scratch — the same template became a paved road that sped up every project's first deploy. Cost management started reactively, triggered by a client flagging a high AWS bill, but past a certain point I put anomaly-alert triggers in place instead of waiting for the next complaint.

Tech: Java, Kotlin, C#, TypeScript, Node.js, React.js, React Native, Next.js, Angular, SvelteKit, Android, iOS, Xamarin, Electron.js, JQuery, Backbone, Python, R, MySQL, PostgreSQL, Redis, GraphQL, Jersey, AWS, ECS, S3, SNS, SQS, Web3, Blockchain, Smart Contracts, Cryptography, Cadence, Flow, Prisma, WebSockets, PayPal, ElasticSearch, REST, JavaScript, Tailwind, React Query, Redux Toolkit, ECharts, Valtio

Simpli · Enclave Wallet • Software Engineer | Product Owner | UI/UX Designer • Jun 2024 - Feb 2025

Enclave is an application for secure digital asset management, built so non-technical users can onboard as smoothly as in a traditional web app. It combines Abstract Accounts, WebAuthn authentication and sponsored transactions, paired with a full on-chain activity explorer. In a small team, I owned the product vision, usability and the entire frontend, contributed to the backend services it relies on, and led the system design of the indexer and API behind the explorer. One example of that indexing work: handling chain reorgs. Every block was stored keyed by its own hash and its parent's, so detecting a reorg meant walking back parent hashes until the indexer found one it already had — the fork point. From there, the orphaned blocks and the balances derived from them were invalidated, and the canonical chain was replayed forward through idempotent handlers, so reprocessing never double-counted a transaction.

Tech: TypeScript, React.js, Next.js, Node.js, PostgreSQL, AWS, ECS, S3, SNS, SQS, Smart Contracts, Cryptography, Prisma, WebSockets, ElasticSearch, REST, Tailwind, React Query, ECharts, Valtio · <https://enclavewallet.com>

Simpli · Neon Wallet • Software Engineer | TechLead • July 2021 - July 2024

Led the architecture of a production mobile application for secure digital asset management, with over \$1 billion in traded volume, and later contributed to its desktop counterpart. Responsibilities included application architecture, backend and API integration, multi-network connectivity, secure authentication, managing multiple accounts simultaneously, WalletConnect integration, the protocol for network communication, and performance optimization.

Tech: TypeScript, React.js, React Native, Blockchain, Electron.js, REST, React Query, Redux Toolkit · <https://coz.io/neon-wallet/>

Simpli · LDC's She Digital • Software Engineer | TechLead • Oct 2019 - Nov 2020

Louis Dreyfus Company, one of the largest commodity traders in the world, commissioned a 'Safety, Health, and Environment' management platform for use across all its global units — each with its own local regulations, forms, and reporting requirements. I owned it end to end: architecture, development, and integration with Azure Active Directory for authentication and user management. The core challenge was translating that sprawl of per-unit requirements into one flexible application instead of one branch per country, so I modeled forms, fields, and workflows as configurable data instead of hardcoded screens — letting a compliance team in a new unit stand up its own SHE process by configuring the platform, not by requesting a code change and a deploy.

Tech: TypeScript, React.js, Kotlin, Java, MySQL, REST, AWS, ECS, ECharts

Simpli · Jamef Customers Dashboard • Software Engineer • Jun 2019 - May 2022

Jamef, the largest shipping company in Brazil, needed a new dashboard for customers to track delivery data, but the existing one suffered from severe performance problems. My scope started as frontend-only, but tracing the slowness back to its source pulled me into the data layer. I introduced a caching layer and a server-side pagination policy for the result set, taking a query that took 8 seconds down to a few milliseconds. I delivered a complex dashboard with several customized graphs and contributed to restructuring the underlying central system.

Tech: TypeScript, React.js, Java, Redis, REST, AWS, ECS, ECharts

Simpli · iTrack • Software Engineer | TechLead • Nov 2016 - 2024

I was the lead engineer who built iTrack Brasil from the ground up, owning its system design through its first two years and scaling it into a B2B delivery platform integrating multiple systems, with nearly 60,000 couriers and over 50 million invoices processed across 2,000 registered companies — growth that led to its acquisition by MadeiraMadeira in 2021. Simpli carried it through that acquisition and ran it three more years before handing it over in 2024, with me on it as CTO, coming back alongside the team when the work needed the depth. One of those returns: a billing alarm fired, Cost Explorer put the spike on Postgres at fiscal month-end, and Performance Insights traced it to clients posting invoices one per request instead of in batch — a transaction, and a WAL flush, per invoice, which no instance class fixes. Ingestion moved behind an SQS queue with concurrent workers committing in batches, autoscaled on backlog per worker, and that fix exposed a second write load underneath: courier position pings, which moved to Redis for last-known position with Parquet history on S3.

Tech: TypeScript, React.js, Kotlin, Java, AWS, S3, SQS, Redis, PostgreSQL, ECS, REST · <https://itrackbrasil.com.br>

Simpli · Apptite • Software Engineer | TechLead • Sep 2015 - 2022

Apptite was a food delivery app for iOS, Android and the web. It gained recognition with acceleration by '500 Startups' and media coverage that established it as an important platform in the artisanal food market. I was the main engineer responsible for the platform from its initial planning and structuring through scaling it as it grew. One example of that scaling work: the dish recommendation engine. The map was discretized into cells holding the stores that served each area, updated in batch, so the geographic lookup was a cached read; personalization then combined signals in parallel over that filtered set, with the heavier estimates precomputed offline.

Tech: Android, Java, MySQL, Redis, S3, SNS, SQS, ECS, ElasticSearch, REST, AWS, JavaScript

Simpli · Multilaser Runin • Software Engineer • Aug 2014 - Oct 2014

Multilaser, one of Brazil's largest cell phone and tablet manufacturers, faced high demand for quality control testing that had been done by hand on the assembly line. I led development of the Android app that automated it instead — running CPU, RAM, GPS, screen brightness, and touch checks — and it has since tested over 20 million devices. One example of that work: each check had its own pass/fail criteria and its own margin for hardware variance, so the real problem wasn't running the tests, it was collapsing five independent, noisy hardware signals into one deterministic pass/fail a line worker could act on in a couple of seconds, fast enough to keep up with a production line moving tens of thousands of units.

Tech: Android, Java, REST

SIMET - NIC.br • Software Engineer • 2010 - 2013

At NIC.br, I worked on SIMET, Brazil's official internet quality measurement tool used by regulators and ISPs alike. The flagship SIMET application still ran as a Java Applet at a time when browsers were starting to lock those out for security reasons, so I proposed and led its migration to plain JavaScript before that became an emergency. Beyond the core tool, I built SimetMapas, visualizing internet quality heat maps across Brazil, and dashboards consumed directly by internet operators and regulatory agencies. I also contributed to SimetBox, a Wi-Fi router built to run these tests automatically, and to an Android testing app with its own custom graphics library for rendering results on constrained hardware.

Tech: JQuery, Backbone, Java, Android, REST, JavaScript · <https://simet.nic.br>

FingerPrint, Escala, NetStartup • Software Engineer • 2007 - 2010

My first three engineering jobs — web applications in PHP and Java, JavaScript front-ends and MySQL.

A selection of projects — the complete history, including those under Notable Achievements, is at <https://gil.solutions>

Education

Pontifícia Universidade Católica de São Paulo (PUC-SP) • Bachelor, Computer Science • 2008 - 2011