

Lucas Matías Frías

Senior Software Engineer — Architecture, security and distributed systems · Agent-assisted engineering

lucasmatiasfrias@live.com · +54 11 5914 2277 · linkedin.com/in/lucasmatiasfrias · lucasfrias.fluxing.app · Buenos Aires, Argentina · Remote



PROFILE

Eight years building software. Lately, event-driven distributed systems: microservices that talk over queues, signed integrations between platforms, and the infrastructure that keeps them running in production.

I work from judgement, not from tooling. The questions that shape my designs are always the same ones: what guarantees this is correct, what happens when it fails, and who is allowed to reach what.

For over a year now I have been building with coding agents. The work moved from writing code to defining the acceptance criteria and the constraints the result has to clear.

ENGINEERING

Architecture and design. I split systems for operational reasons, not for fashion. Every boundary has to be justifiable by something that actually happens in production.

Security. Not a layer bolted on at the end, but the property that decides the shape of the system.

Reliability and operations. Design for the day something breaks, because it will. What matters is whether you can see it, trace it and replay it.

Methodology and team. Code is half the job. The other half is that someone else can understand it, extend it and trust it.

Engineering with agents. I have not hand-written code in over a year. I specify, constrain and verify. I replaced line-by-line diff reading with verifiable constraints. The work moved from writing code to defining the acceptance criteria: contracts, tests as executable specification, complexity and dependency limits, and an architecture that makes the system verifiable in parts.

EXPERIENCE

Software Engineer & Project Manager · Otimify

May 2026 – present

Montevideo, Uruguay · remote

Design and construction of the in-house apps platform that extends the CRM the operation runs on: event pipeline, single sign-on, per-module permissions and the agent builder. In parallel, project management and prioritisation with clients.

Co-Founder · Fluxing LLC

Feb 2026 – present

United States · remote

An in-house business automation product. Architecture, backend, authentication and licensing, infrastructure and deployment.

Programming Lecturer · Universidad Nacional de José C. Paz

2019 – present

Buenos Aires, Argentina

Introduction to Programming, and Algorithms and Programming, in the BSc in Information Technology Management.

Software Engineer · The Old School Services

Mar 2024 – Feb 2026

Buenos Aires, Argentina · remote

Designed, built and operated event-driven microservices in Java 17, talking over a message broker and collaborating with Node.js and Python services. Integrated SaaS platforms through APIs and signed webhooks defined contract-first, with a strong focus on resilience — retries with backoff, idempotency — observability and security. Built a custom instant-messaging provider, registered as a native channel of the CRM, that holds the session, sends and receives through the platform's API and publishes every message onto the broker for the asynchronous services to process. Agents running in production for sales and appointment scheduling.

Data Engineer · Roche

Mar 2022 – Oct 2024

Buenos Aires, Argentina

ETL processes, SQL Server administration and modelling over relational databases. A Python library published on PyPI unifying access to the company's data warehouses. Scraping and reverse engineering of public APIs to bring external data in, a natural-language-to-SQL chatbot, and analytics dashboards.

Virtual campus developer and administrator · Universidad Nacional de José C. Paz

Buenos Aires, Argentina

Built a custom client against the LMS REST API to automate what the platform did not expose: course and user provisioning, enrolments, and synchronisation with the university's systems. Campus frontend in HTML, CSS and React. Data modelling and queries over MariaDB and PostgreSQL, with ad-hoc reporting for the administrative departments. Deployment, configuration and maintenance of the campus and its plugins.

Website Administrator · Argentine National Secretariat of Modernisation

Buenos Aires, Argentina

Frontend of the institutional site, LAMP server administration, and the database behind the public examinations system.

Aug 2018 – Sep 2025

Mar 2018 – Aug 2018

SELECTED PROJECTS

An apps platform on top of a SaaS ecosystem · Otimify · 2026

Extending a third-party CRM with in-house modules that carry their own permissions, without being able to touch its code.

Java 17 · Spring Boot · PostgreSQL · RabbitMQ · React · Python · FastAPI · Docker · Caddy

A portal against a real payment gateway · Personal project · 2026 · [handy-poc.fluxing.app](#)

A prototype that speaks a payment gateway's real protocol, reconstructed from scanned documentation.

Flutter · Node.js · WebSocket · RSA-SHA256 · Docker

Business automation platform · Fluxing LLC · own product

The authentication and licensing server for the desktop application: signed credentials, bcrypt hashing, a server-side session for the admin panel and an audit trail of every access attempt. Around it, the product's synchronisation and orchestration services.

Python · FastAPI · SQLAlchemy · JWT · Docker

A messaging provider of my own · Software engineering · 2024–2026

An instant-messaging channel built from scratch on the Baileys library and registered as a native provider of the CRM: it holds the session, reconnects, sends and receives through the platform's API, and publishes every message onto the broker for the asynchronous microservices to process. Three languages talking over queues, with signed webhooks, idempotency and retries with backoff.

Node.js · Fastify · Baileys · Java 17 · Spring Boot · RabbitMQ · PostgreSQL

Data and natural language over the warehouse · Roche · 2022–2024

A Python library published on PyPI to reach several corporate data warehouses through a single client. A chatbot that turns natural-language questions into executable SQL against those warehouses and answers with the results. ETL processes, analytics dashboards, and reverse engineering of public APIs to bring external data in.

Python · FastAPI · SQLAlchemy · SQL Server · SSIS · Tableau

EDUCATION

University Programmer Analyst

Universidad Nacional de José C. Paz

· 2016 – 2019

CERTIFICATIONS

Object-Oriented Design — EscuelalIT

(2020)

Denodo — data virtualisation, four

modules (2022)

TECHNOLOGIES

Languages	Java · Python · JavaScript · TypeScript · Dart · SQL
Backend	Spring Boot · FastAPI · Node.js · Fastify · Express · SQLAlchemy
Data	PostgreSQL · SQL Server · MySQL · MariaDB · Oracle · SSIS · Tableau
Integration and messaging	RabbitMQ · REST · OpenAPI · Signed webhooks · WebSocket · n8n
Infrastructure	Docker · Docker Compose · nginx · Caddy · Linux · Git · CI/CD
Security	RSA · Ed25519 · JWT · OAuth 2.0 · bcrypt · RBAC · Container isolation
Frontend and mobile	Flutter · React · Vite · HTML · CSS
AI	Claude Code · MCP · OpenAI API · LLMs in production

Extended version, with the detail of each project: [lucasfrias.fluxing.app](#)