

Luis Fernando Barrera

Senior Software Engineer

(Python, Finance, Accounting, Business, Clojure)

ABOUT

Senior Software Engineering Manager with a strong drive for building software, leading teams, structuring chaos, organizing complexity. I achieve team objectives by fostering discussions to deeply understand problems and tackle them with a practical, hands-on approach, engage in coding and problem-solving alongside the team, focus on collective success and foster a collaborative environment. Experienced in building teams and mentoring people.

Skilled and enthusiastic Python Programmer since 2008 with a solid background in Finance, Accounting and Business their Data and Applications. I love to design and to analyze data through building applications and libraries. I just don't develop projects, I am proud to craft them.

If your data or project has symbols like '\$¢£€¥%', you would probably like to share a coffee or interview me.

LAST JOBS

Nubank — Senior Software Engineer (Global Money In)

2024/12-current

Senior Engineer in the Global Money-In squad building amazing experiences for our customers to bring money to Nubank in Brazil, Mexico and Colombia. Using Clojure, Datomic, microservices and other proprietary technologies from Nubank.

Sofía Salud — Senior Backend Engineer (Payments)

2024/05-2024/12

Engineer in the Payments and Claims department in Sofía Salud, a health insurance & health company. Using Python, Django and GraphQL.

Banco Covalto / Credijusto — Senior Engineering Manager, Data Engineer, Tech Lead

2020/02 - 2024/03

Engineering Manager (Fincore/ESB Squad). Portfolio Migration Leader in all the quantitative data as a consultant and Data Engineer. Python/Django programmer working in the Financial Core (Fincore) team. Defined a new Architecture for services.

Check full CV for full detailed job experience:

<https://cv.luisfernandobarrera.com/cv.pdf>

Remote / Mexico City, Mexico

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github [luisfernandobarrera](#)

full CV [cv.pdf \(link\)](#)

SKILLS

Python Data Programming

pandas · dataclasses · numPy · SQLAlchemy · advanced SQL · postgresSQL · SQLite3 · NoSQL

Python Web Development

django · fastAPI · flask · django-REST · tortoiseORM · REST API · GraphQL · javascript · VueJS · React · HTMX · SASS

Clojure

clojure · clojurescript · datomic · datalog

Engineering Management

team building · OKRs and KPIs · mentoring · DevOps · agile methodologies · product requirements · software architecture & design · project management

Business

administration · accounting · finance · software for SMB · ERP · CRM · taxes · electronic invoicing · electronic signature · financial math · payment systems · electronic signature ·

Tools

AI-driven coding · docker · kubernetes · bash · linux · excel VBA · CircleCI · SDLC · code quality · clean code · networking · continuous integration · grafana

LANGUAGES

Spanish —Native

English —C1

Portuguese —C1

EDUCATION

Economics —UNAM (Bachelor)

2010-08 / 2013-05

PROJECTS

Treasury API (Banking API)

Treasury API to expose movements to bank customers

Proposed, designed, gathered requirements with potential customers, planned, and led the project for real-time bank account movement queries via REST or Webhook. Designed the project as a first step in an Open Banking initiative for Covalto.

Firmas / Mifiel (Web application)

Electronic Signature System

A monolith of services to gather documents for signature, integrate with salesforce and other systems and allow the customers and bank workers the signature of documents with a mexican electronic fiscal signature (e.firma). Allows the signature of endosable promissory notes with Mifiel blockchain.

Pennyworth (Financial Math/Accounting Library)

A full-fledged multipurpose financial and accounting library.

A library with modules to calculate interest, work with cash flows and time value, handle payments, keep accounting, and calculate and solve amortization tables (schedules). A system to generate an Account Statement based on the Contract Structure and applying it to get the correct balance per different scopes such as loan, date, iou, version.

Kardex (Loan Accounting System)

A system designed to make calculations on loans

Credijusto Loan Management system is a non-transactional system that registers balances instead of transactions. Kardex is a data structure that allows getting the different balances for each loan at any point of time aggregating all the transactions up to that day. Connect to the existing systems, Loan Management System and CRM, to gather existing data and convert it to transactions.

Calculate the regular interest, moratory interest, penalties, fees and balances in time using different algorithms of calculation depending on rules for products while maintaining accounting consistency, and using debits and credits.

Experos (ERP)

Custom ERP with Accounting Functionality

A micro-ERP with Invoicing, Purchases, Accounts Payable and Receivable capabilities to manage the company and automate processes, and eventually to merchandise it.

company · role · date · skills

Banco Covalto

Product Designer · Architect · Manager

2024/02 to 2024/03

kafka · django · accounting · reconciliation systems · product design · webhooks · customer requirements · auth0 · regulations & compliance

Banco Covalto

Python Developer. Frontend Developer. Manager.

2023/04 to 2024/03

fastapi · web development postgresql · tortoiseORM mifiel · e.signature · blockchain aws s3 · google cloud · kubernetes

Banco Covalto

Designer. Python Developer.

2022/01 to 2022/12

business data · financial math · accounting · numpy_financial dataclasses · pandas · jupyter.

Banco Covalto & Credijusto

Designer. Python Developer.

2020/02 to 2022/12

business data · financial math · accounting · financial libraries dataclasses · pandas · jupyter sqlite3 · sqlalchemy

Nextor Telecom

Designer. Python Developer.

2015/03 to 2017/01

fullstack · accounting · postgresQL django · django-rest · APIs · xml · electronic invoicing · knockout.js