



WHO'S THIS

I'm a software engineer and manager with a passion for creating impactful products that positively transform people's lives. My motivation lies in products that drive fundamental change and innovation. I'm mostly interested in working with platform and product engineering teams using the cloud and innovative technologies.

I have a diverse background and experience having worked with Go, Python, JavaScript, Postgres, Elastic Search, MongoDB, and cloud-native technologies such as AWS, Docker, Terraform, and GCP. I have a strong interest in software design and architecture, product, and mentoring.

With over 8 years of experience, having been an individual contributor, a former engineering leader, and a mentor, I've helped organizations and individuals to design, build, and scale their engineering teams, products, processes, and culture by designing, building and crafting scalable and secure processes and software solutions.

EXPERIENCE

Apr 2023 – Present
Mexico (Remote)

Senior Software Engineer – Apli ([apli.jobs](#))

Software Design & Architecture / Reliability & Performance / Python / Terraform / AWS / Postgres / Microservices

After deciding to leave my CTO role, I decided to stay at Apli as a Senior Software Engineer to continue growing as an engineer and to help the company with the transition.

I reduced the API response time by 10x by leveraging Postgres optimizations such as indexes and cluster configuration.

I also led and contributed to the design and implementation of an auto-posting project leveraging event-driven architecture and AWS services such as Batch, SQS, and Lambda. This project also leveraged RPA (Robotic Process Automation) to automate job postings on Job Board websites.

Oct 2018 – Apr 2023
Mexico (Remote)

CTO – Apli ([apli.jobs](#))

Python / Go / Javascript (React) / Terraform / AWS / Postgres / DynamoDB / Elastic Search / MongoDB / Software Design & Architecture / Cloud Infrastructure / Microservices / People Development & Management / Product & Project Management / Engineering Leadership

I was a very hands-on CTO, leading the engineering team in regard to people management, organization processes, and cross-team collaboration. I was also responsible for the design and implementation of some of the company's software solutions.

In regard to people management, I was responsible for the hiring, onboarding, and performance reviews of the engineering team in order to help them grow - including the design of each of these processes. I also designed the engineering career ladder which helped to keep a low rotation rate - this initiative was later adopted by the whole company.

In regard to organization processes, I proposed and led product and project management initiatives across the company such as weekly catch-ups with other leaders, recurrent all-hands meetings, bi-weekly bug review meetings, and the implementation and evangelization of productivity tools such as ClickUp, Slack integrations, Retool, and others.

Additionally, enforced engineering processes such as code reviews, pull requests, on-call rotations, DORA metrics, and others.

Regarding software design and architecture, I was responsible for the design and implementation of some of the company's critical software solutions such as:

- Side effects: a system to trigger configurable actions based on changes in some database tables. Leveraging techniques such as polling and asynchronous execution to achieve high performance and reliability.
- Recruitment Pipeline: the main system capability responsible for managing the whole recruitment process. This Lego-like software solution was designed to be highly configurable and extensible and has been used by the company to manage over 3M candidates with highly customizable processes demanded by customers such as BBVA, Grupo Bimbo, and others.
- Openings Locator: a system leveraging Postgres' natural language capabilities to allow chat-users to search for locations where there are openings available in a conversational style.
- Job Boards Automation Messaging: a system to reach out to candidates that applied via Job Board websites to continue their process via Apli's chatbot. Notifications are highly configurable allowing N number of follow-up notifications, and different messaging channels such as Email, WhatsApp, and SMS. This system leveraged event-driven architecture, RPA (Robotic Process Automation), and AWS services such as Batch, DynamoDB, SQS, and Lambda.
- Conversational platform: led the engineering product team responsible for the product and technical design of Apli's core chatbot platform in record time (< 6 months). Also, contributed with this system's Conversation Flow State capability taking inspiration from data structures such as stacks and queues to allow the chatbot to handle complex conversation scenarios. This capability has been used by over 10M conversations and was highly optimized at Postgres level to achieve < 500ms response times since the chatbot user sends a message until the chatbot responds.
- Infrastructure: designed and implemented the first version of Apli's infrastructure on AWS for both platforms (Conversations and Recruitment). The first version was designed to be highly available and scalable and was later migrated to a more robust and secure infrastructure.
- CI & CD: designed and implemented continuous integration and continuous delivery pipelines using Team City and GitHub Actions. This allowed the engineering team to deploy to production multiple times a day with confidence.

In regard to security, I participated in the company's efforts to achieve the ISO 27001 certification. I was responsible for defining the company's security posture and corresponding policies in regard to device management, access control, software development, and infrastructure. This included the deployment of MDM, AV, and cloud security solutions such as Kandji, CrowdStrike, AWS Security Hub, and others.

Before leaving this role, I redesigned the engineering organization structure to better align with the company's long-term goals and to set the foundation to scale the engineering team.

Jan – Oct 2018
Mexico City

Tech Lead – Apli (apli.jobs)

Python / Javascript (React & Node) / AWS / Postgres / Project Management

I led a five-developers team and I was responsible for breaking down software projects, previously delimited by the CTO, as well as their prioritization and assignment to my engineering peers. I also led daily SCRUM-like meetings and weekly catch-ups with C-level management.

I was also responsible for AWS Infrastructure monitoring and maintenance.

Nov 2017 – Jan 2018
Mexico City

Senior Software Engineer – Apli ([apli.jobs](#))

Management / Python / Javascript (React & Node) / AWS / Elastic Search / SQL (Postgres) / MongoDB / Microservices

Responsible for designing software solutions for internal operations teams along with leading bug hunting efforts.

May – Nov 2017
Mexico City

Front-end Developer – Inventive ([inventivehack.com](#))

ReactJS / AWS (S3)

I led frontend projects for customers like Boletia, Punkpost, and Custodian. I was responsible for the quality, good practices by the team, along with tasks definition.

I was also responsible for the design and implementation of the frontend architecture and collaborated closely with the company customer's engineering teams to set goals and roadmaps.

Jun 2016 – Apr 2017
Mexico City

Full-stack Developer – Sable ([sable.mx](#))

Python / Ruby / ReactJS / Digital Ocean

I led the engineering team in charge of designing and implementing Gestionix's (Sable's customer, acquired by Konfio in 2020) Accountants platform, and collaborated with the UI and UX designers on the frontend (ReactJS).

I also collaborated closely with the UI and UX teams to implement software solutions using Ruby on Rails, JavaScript, and CSS.

Sept 2015 – Apr 2017
Mexico City

Software Developer – Asistia ([asistia.mx](#))

Python (Django + Celery) / React Native / Digital Ocean

Set the foundation for Asistia's software platform by designing and implementing the a RESTful API, using Django and Celery, a React Native App (Android only), and internal operations tools.

Collaborated in SCRUM-like biweekly sprints, helping to delimit, prioritize, and estimate tasks complexity.

Briefly led a two-developers team. Rejected an offer to become the CTO but stayed at the company to learn from the hired CTO.

Jan – Dec 2015
Mexico City

Course instructor & Software developer – Dev.F ([devf.la](#))

Python / Public speaking

Co-designed DevF's education program for 2015, from basic to intermediate software development.

Mentored +50 students, teaching topics ranging from basic to intermediate software development such as Python, Django, Git, and Linux.

As a software developer I was designed and implemented DevF's very first payment system which continued to be used until 2018.

Jan – Aug 2015
Mexico City

Software Developer – Angel Ventures Mexico ([angelventures.vc](#))

Ruby / Wordpress / Node.js

Worked on a portfolio's company (Meridia) internal system using Ruby on Rails with previously delimited and defined features.

Implemented WordPress-based landing pages for Meridia's subsidiaries.

EDUCATION

2011 – 2016
(Drop-out)

BS - Computer Systems Engineering
IPN - Escuela Superior de Cómputo
Completed 80% of credits.

OTHER

2015 – 2016

Co-Founder, Co-organizer & Speaker
Chilango Django

Public speaking / Community management

Co-founded and co-organized the largest meetup for Python and Django in Mexico City with +1.5k members.

Talks: Celery, Python Mocking, Introduction to Python & Django

2012
Online

Teacher

Codigo Facilito (codigofacilito.com)

Recorded Python 2.7 and Javascript + jQuery video-courses. Both with thousands of students across Latin America.

Video edition

LANGUAGES

Spanish - native / **English** - proficient / **Italian** - learning

FAVORITE BOOKS

Build, by *Tony Fadell*

The Phoenix Project, by *Gene Kim et al.*

Think Like a Rocket Scientists, by *Ozan Varol*

The Staff Engineer's Path, by *Tanya Reilly*