# Facundo Olano

I have over 15 years of experience in the software industry, most recently working as a tech lead and backend engineer.

I'm more of a problem-solver than a technologist: I try to keep a business perspective in software discussions and provide technical insight to non-engineers. I tend to assume a leadership role in the teams I integrate, leading by example and from experience rather than title. Because I think that software development is primarily a human activity, I place a high value on effective communication and knowledge sharing.

I designed, developed, and operated large-scale distributed systems using various technologies and programming languages (Python, Erlang, Rust, JavaScript, AWS, PostgreSQL). I also have significant experience in technical writing, legacy modernizations, project management, DevOps, and full-stack web development. I write about software on my blog and have published several Open-Source Software projects.

## Contact

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- LinkedIn
- GitHub
- Location: Buenos Aires, Argentina (GMT-3)

## Selected writing

- Software Design is Knowledge Building
- A Note on Essential Complexity
- Squeezing the most out of the server: Erlang Profiling
- Rustenstein 3D: Game programming like it's 1992

## Selected projects

- software-papers: a curated list of papers for software engineers.
- jorge: a static site generator written in Go.
- feedi: a personal news feed written in Python.
- rpg-cli: a command-line role-playing game written in Rust.

## Education

**Software Engineering** @Universidad de Buenos Aires 2006 - 2013
6-year career program, similar to a master's degree. Focused on Sciences, Systems Programming and Software Design.

**Graduate Advisor** @Universidad de Buenos Aires 2020 - 2022
As a graduate member of the Curricular Commission I contributed to the design of the new Software Engineering career program.

## Professional Experience

@Marsie

**Staff Software Engineer** Sep 2024 - Present
Design, development, and operations on the Billing Team of a genetic testing company.

- Improved fault tolerance and observability of the system, reducing 90% of release incidents.

- Redesigned the data model to provide better business visibility into the system's operations.

- Led an infrastructure migration from AWS to OCI for cost savings.

- Designed and implemented a workflow architecture using Temporal.io to improve visibility, fault tolerance, and efficiency of the billing processes.

Python - FastAPI - SqlAlchemy - Kubernetes - Helm - React - Temporal - Datadog

@Freelance                                                                 7 months

**Software Engineering Consultant** Feb 2024 - Aug 2024
Assisted an early-stage startup building a data extraction service around Large Language Models.

Python - FastAPI - Open - LLMs - Celery

@LambdaClass                                                        5 years 10 months

**Staff Software Engineer** Jul 2022 - Mar 2023
As a Staff Engineer I report directly to the CEO. I provided technical leadership for about 20 people on a newly formed organization within the company. I started a Platform Team to support the rest of the organization and later led a distributed systems research and development effort.

Distributed Systems - Rust - Terraform - AWS - Nomad - Docker - PostgreSQL

**Senior Software Engineer** @NextRoll Feb 2018 - Jul 2022
As part of the Real-time bidding team, I worked on design, development, maintenance and operation of the bidding service and its support systems. These were decade-old systems, deployed to 2000 servers across the world, with high traffic and low latency restrictions. Operations work included infrastructure set up, deploys, monitoring, and production incident handling.

I assumed informal leadership of the team during its 3x growth and collaborated in projects with internal and external stakeholders (Engineering, Product, Legal, Supply, Ad Exchanges, Service providers).

Some of the work efforts I led at NextRoll:

- Streamline and automate new exchange integrations, a process that went from a couple of months to a couple of weeks.
- Automate several periodic operational tasks, in particular reducing deploy time from 6 hours to 45 minutes.
- Modernize and decomission legacy systems.
- Implement a tool to assess canary deploy health from DataDog metrics, using Pandas.
- Profile and optimize the server performance with the specific goal of infrastrcuture cost savings.
- Redesign, prototype and future-proof systems in preparation for privacy-related changes in the Ad Tech industry.

AdTech - Distributed Systems - DevOps - Erlang - Python - Elixir - JavaScript - PostgreSQL - AWS - Terraform - Datadog

### Senior Software Engineer Jun 2017 - Feb 2018
As one of the first engineers to join LambdaClass, I divided my time between open-source projects and contractor work for one of the clients.

Erlang - Clojure - WebRTC - Cassandra - Riak


@Mad Mobile                                                                 1 year 4 months

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### Senior Software Engineer Mar 2016 - Jun 2017
As part of the Core Services team, I designed and developed a Backend as a Service platform to support the mobile applications developed by the company. The platform, implemented by a set of microservices, provided integration with external services as well as support functionality like authentication, authorization, analytics and caching.

I led the design of some of the most complex features of the platform such as a decentralised system for environment migrations and On-Premise to Cloud communications through a cluster of Web Sockets.

Distributed Systems - Microservices - Node.js - Clojure - MongoDB - RabbitMQ - ElasticSearch - Redis - socket.io


@Globant                                                                    1 year 11 months

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### Tech Lead @National Geographic May 2013 - Mar 2015
As the lead Engineer of the Services Team, I designed and developed a set of RESTful services used by systems across the organization. I interviewed candidates, mentored new members of the team, scoped projects and acted as the technical touchpoint between the customer and the consultancy managers.

Python - Django - DjangoRestFramework - ElasticSearch - Haystack - PostgreSQL - WSO2

### Senior Python Developer @National Geographic May 2013 - Mar 2014
Backend development for the National Geographic Magazine online edition.

Python - Django - DjangoRestFramework - ElasticSearch - Haystack - PostgreSQL

@Freelance                                                                  2 years 11 months

**Python/Django Developer** Jul 2010 - May 2013

Full stack development of web applications for both local and US-based customers.

Python - Django - MySQL - PostgreSQL - Solr - Haystack - Celery - RabbitMQ - Apache - nginx - JQuery