# RODRIGO DE SARASQUETA

# Machine Learning Engineer & Python Developer

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  - GitHub

Machine Learning Engineer focused on building Al-powered systems, intelligent agents, and data-driven backend infrastructure. With over 3 years of hands-on experience in Al/ML and production systems, I specialize in designing and refining intelligent agents that reason, plan, and use tools autonomously.

At Outlier (Scale AI), I work on large language models (LLMs), agent orchestration, and human-in-the-loop evaluation pipelines, contributing to production-grade applications in automation, decision-making, and enterprise workflows. I apply modern ML techniques, prompt engineering, and retrieval-augmented generation (RAG) to build robust solutions that solve real-world problems.

## **CURRENT KEY PROJECTS**

#### SoundGraph - Al-Powered Music Analysis Tool for DJs

Neural network system that predicts musical style from MP3 files, extracts BPM and key detection, and generates visual representations for creative DJ workflows. Built with Python, TensorFlow, and audio processing libraries.

#### IndieHoy Community Platform – Microservices & Al Chatbot

Developing scalable discount management system with FastAPI and SQL, integrated with intelligent chatbot using OLLAMA, LLaMA, and LangChain for enhanced community interaction.

## **WORK EXPERIENCE**

Outlier (Scale AI)

- Lead contributor and team lead in multiple reinforcement learning and evaluation projects for LLMs
- Design and implement agent orchestration systems and human-in-the-loop evaluation pipelines
- Specialize in instruction optimization, tool-based task generation, and multi-turn evaluation for autonomous agents
- · Apply advanced ML techniques including RAG and prompt engineering to enhance model performance
- Collaborate cross-functionally to deliver production-grade conversational agents and intelligent automation systems

## **Fullstack Developer**

2024 - Present

**IndieHoy Community Project** 

- · Developing microservices architecture for discount management system using FastAPI and SQL
- Building intelligent chatbot using OLLAMA, LLaMA, and LangChain for community engagement
- Implementing scalable backend infrastructure for music community platform

## **Machine Learning Engineer**

Jan 2023 - Jul 2023

AnyoneAl

- Developed and optimized GPT-based insurance chatbot using advanced prompt engineering techniques
- · Built end-to-end ML pipeline for credit risk evaluation model with scalable backend architecture
- · Technologies: Python, Flask, GPT API, Pandas, Docker

## **Frontend Developer**

Apr 2023 – Jun 2023

Monytize

- Rebuilt multimedia application in React Native from Figma prototypes with rapid 2-month delivery
- Technologies: React Native, Expo

#### **Backend Developer**

Jan 2023 - Mar 2023

**Pagie Portal** 

- · Architected and developed REST APIs using Django and SQL for gaming/web services
- Built custom job application server with scalable database design

## **Fullstack Developer**

Mar 2022 - Oct 2022

**TotalAbogados** 

- Created Flask microservices architecture including QR-based promotion system and referral management
- Migrated legacy frontend to React with improved user experience and performance
- Developed internal automation tools for legal service workflows

Mentor 2021 – 2022

#### CoderHouse & Plataforma5

- Mentored students in backend/fullstack technologies including Node.js and Python
- · Conducted technical reviews, consultations, and co-developed educational materials

## **SKILLS**

## AI/ML

Python, TensorFlow, LangChain, RAG, Prompt Engineering, LLM Fine-tuning, Agent Orchestration, OLLAMA, LLaMA

## **Data Science**

Pandas, NumPy, SKlearn, Data Processing Pipelines

## Languages

Spanish (Native), English (Fluent), German (B1.3)

#### **Backend**

Flask, Django, FastAPI, REST APIs, Microservices, SQL, Docker, Git

#### **Frontend**

JavaScript, React, Redux, React Native

# **EDUCATION**

AnyoneAl – Specialization in LLM Agents (In Progress)

GreatLearning - LangChain Course

AnyoneAl - Machine Learning and Data Science Bootcamp

Coursera Google Cloud - Introduction to Generative Al

Plataforma5 - Fullstack Bootcamp

CodeAcademy - Python Programming, HTML, JavaScript

University of Buenos Aires (UBA) – Bachelor's Degree in Biological Sciences (Incomplete)