Agustín Federico Stigliano

Córdoba Capital, Córdoba, Argentina Cellphone: +54 3516109966 E-mail: af.stigliano@gmail.com

LinkedIn: https://linkedin.com/in/agustin-stigliano/ GitHub: https://github.com/jackonedev

DS & ML Engineer - Generative AI Developer

I started with **Python** in 2014, and by 2021, I began formal studies in this programming language. Having completed almost the entire degree in **Electromechanical Engineering**, I took my first steps in **Data Science and Machine Learning**, supported by a strong background in Mathematics and Physics. I then started developing my first **web applications** focused on the **back end**, achieving certification from MercadoPago for my e-commerce platform. For over a year, I have dedicated myself to implementing AI models to create applications that provide solutions in **NLP** and **Generative AI**.

Work Experience

QA Tester & Prompt Engineer (RLHF) at Scale Al link

January 2024 to date

LLM fine-tuning by reinforcement learning by human feedback technique.

- Evaluate and comparison of LLM responses
- Guidance of multiple LLMs through a turn-by-turn conversation
- Experience in conversational agents, tool logs agents, and coding agents
- Generating edge complex cases for model training

Machine Learning Engineer at Anyone Al link

November 2023 to April 2024

Highly selective fellowship program where top talent comes to accelerate their machine learning careers.

- Develop a Generative AI Chatbot for an Insurance Policy Company using LangChain
- Implementation of the OpenAl API and Cohere rerank
- PDF RAGs
- Web Scraper RAGs
- Application design with a microservices architecture using Docker
- Creating a User Interface chatbot using Chainlit

•

<u>Main Technologies</u>: Langchain, Chainlit, Apache-Airflow, Scikit-Learn, Keras, LightGBM, Matplotlib, Seaborn, Pytest, Docker, Flask, Redis, Qdrant

Data Scientist and Python Developer at Reputacion Digital link

September 2023 to November 2023

"Social Listening" for monitoring social networks with NLP tools for trend topic detection, sentiment analysis, and reporting.

- Implementation of fine-tuned LLM on HuggingFace for NLP purposes.
- Data visualization through customizable Word Clouds, Time Series, graphs of donuts in polar coordinates, pie charts, bar charts, and histograms.
- Building customizable tools for data analytics reports
- Optimization of model ingest through multithreading or data streaming (+10 times faster)
- Optimization of ensemble models in parallel executions (+2 times faster)
- Prompt Engineering for role-playing LLM, focused on creating speeches for audiences

<u>Main Technologies</u>: Pandas, HuggingFace, Python concurrent, Plotly, Bokeh, wordcloud, NLTK, Spacy, tiktoken, Pydantic

Backend Web Developer at Cassaro Chopp <u>link</u>

June 2023 to July 2023

Beer Factory since 1984 - equipment rental - sale of products - recharging fire extinguishers.

- Digitization of the lease contract for the rental of equipment developing an API REST connected to a database.
- Creation of a beta frontend interface to show the functionality of the API
- Proposal for an API interface for the transparent generation of draws and raffles

Main Technologies: FastAPI, Pytest, PostgreSQL, Pydantic, SQLAlchemy, OAuth2, React.JS

Python Online Teacher at Classgap link

January 2023 to June 2023

Web Platform for reaching students from all parts of the world.

- Explanation of Data Science project and the technologies involved.
- Media content creation for asynchronous classes.
- Student's guidance to complete courses about Data Science.

Main Technologies: Python, Jupyter Notebook, Python Standard Library, PiPy, Python Package.

Freelance Project

OCR GPT Assistant link

Optical Character Recognition plus LLM with tools (GPT)

Less than 3 weeks of development (July 2024):

- Week 1: Study of the Technologies and the Case
- Week 2: Building CI Pipelines and implementing the Tesseract model (plus documentation)
- Week 3: Implementing OpenAI GPT with schematization tool, microservices infrastructure (plus documentation)

The application aims to automate the recording of daily physical documents within a relational database. The application contains two models, Google Tesseract as an optical recognition engine, and OpenAI GPT with tools that allow you to fill predefined tables based on the text extracted from the image.

Main Technologies: GitHub Actions, Docker, RabbitMQ, Tesseract, LangChain, FastAPI, Pydantic, Pytest

Skills

Python Libraries and Frameworks:

- DS & ML LIBRARIES:
 - Numpy, Pandas, Scipy, Scikit-Learn, XGBoost, LightGBM, Spacy, NLTK
- GenAl FRAMEWORKS:
 - LangChain, LangGraph, Transformers, Pytorch, Tensorflow Keras
- VISUALIZATION LIBRARIES:
 - Plotly, Bokeh, Seaborn, Matplotlib.pyplot, Matplotlib.animations
- BACKEND FRAMEWORKS:
 - FastAPI, Flask, Django, Pydantic, SQLAlchemy, Pytest

Databases and Vector Store:

- SQLite
- PostgreSQL
- Qdrant

Infrastructure and Orchestration Tools and Technologies:

- Apache-Airflow
- MLFlow Tracking
- RabbitMQ
- Redis
- Docker
- GitHub Actions

Frontend Development (Basic): HTML/CSS, React.JS, PyScript, Bootstrap

Development and Deployment Tools:

- GitHub Codespaces
- Deta Space
- Heroku
- PythonAnywhere
- Microsoft Azure

Interactive Data Presentation Tools:

- Jupyter Notebook
- Mercury
- ChartStudio

SDK's: MercadoPago SDK, Meta SDK (Whatsapp Business), Binance SDK, OpenAl SDK, Cohere SDK

Soft Skills: Scrum agile methodology

Languages:

- Fluent in English
- Native Spanish
- Basic Italian

Education

Electromechanical Engineer (UNC - FCEFyN)

Universidad Nacional de Córdoba - Facultad de Ciencias Exactas, Físicas y Naturales

2014 – 2020 (on hold)

- No degree obtained
- 37/50 approved subjects
- 7,67 general average
- Scholarship of a year to work in the Low Voltage Laboratory
- Enabling registration as a provincial electrician

Certifications

Multimodal RAGs: Chat with videos - DeepLearning.ai	Oct 2024
Machine Learning Engineer - Anyone Al	Nov 2023 – Apr 2024
Neural Networks and Deep Learning - DeepLearning.ai	Oct 2023
Checkout Pro Integrator – Mercado Pago Developers	Aug 2023
Prompt Engineering for ChatGPT - Vanderbilt University	Jul 2023
PyScript 101 – Udemy	Jul 2022
Data Science Bootcamp – Digital House	Dec 2021 - Jul 2022
Python API Programming with FastAPI and Flask - Udemy	Jul 2022
Statistics and probability for Quantitative Finance - Quantreo	Apr 2022
Introduction to Python Programming - Coursera	Aug 2021