



Juan Luis Ruiz-Tagle

Data Scientist

Profile

I am a data scientist interested primarily in spatial analytics, time series forecasting and optimization. I am a resolute person who addresses problems from a business perspective and works both hard and smart.

Employment History

Data Scientist at CARTO

December 2020 — Present

CARTO is a startup focused on spatial data science solutions. I have:

- Implemented spatial statistics and ML algorithms in SQL to run them at scale on cloud data warehouses.
- Worked with spatial models for estimating accumulated litter in cities at a granular level.
- Built PoC optimization solutions for vehicle routing and territory management.
- Designed spatial indexes for clients which combined target demographics, POI presence density and mobility data.
- Identified trends in hotspot areas for retail during the pandemic using human mobility data (origin-destination matrix computation, POI and time series analysis, etc)
- Built ETLs with Airflow to recurrently ingest spatial data from several data sources into our platform.

Data Scientist at Acciona

September 2020 — December 2020

Data Scientist at ETS Asset Management Factory

December 2019 — June 2020

ETS Factory is a financial advisory firm which makes stock market investment recommendations driven by data science.

- I developed a RESTful API based on Flask which serves synthetic stock series created by generative models on demand.
- I put into production a novel deep learning portfolio investment strategy and deployed it to our internal servers to automate portfolio recommendations.

Data Analyst at Seedtag, Madrid

April 2019 — August 2019

Seedtag is an adtech startup which sells in-image advertisement.

- I built an ETL which aggregated data from Seedtag's advertising campaigns.
- I helped the CEO to prepare the company's next funding round by analyzing revenues and client fidelity.

Portfolio projects

Spatial Modeling of New York taxi data

I run an EDA of taxi data in NY and combine it with socioeconomic data to build a [geographically weighted regression](#) model.

Finalist at Cajamar UniversityHack Datathon 2020

Details

Madrid, Spain

juanluis.rto@gmail.com

Nationality

Spanish

Skills

Python

Spatial Data Science & GIS

Machine Learning
(Scikit-Learn, statsmodels)

Deep Learning (Tensorflow)

Google Cloud (BigQuery,
Compute Engine, Cloud Run)

SQL

Apache Airflow

Apache Spark

Docker

Optimization (or-tools)

Version Control (Git)

Other languages (R, Java, JS)

Problem-solving, Leadership

Languages

Spanish

English

Swedish

French

Hobbies

Hiking, piano, photography,
woodcraft

Links

juanluis.me

github.com/juanluisrto/

linkedin.com/in/juanluisrto/

Together with my team, I got classified to the [final phase](#) of the Minsait Challenge. Our code is available on [Github](#).

Computer vision: Traffic sign detection and classification

[Attempt](#) to predict signs from the German Traffic Sign dataset with CNNs, data augmentation and non-maximum-suppression.

Svenska Scraper

A [scraper](#) I built to help me study the Swedish language. Given a list of words in Spanish, it gathers their translations as well as example sentences.

Leader and main organizer of volunteering camp at IYC, Uganda

July 2017

Backed by [IYC](#) (NGO), I organized a volunteering camp where a group of 15 students from different countries went to Uganda. For 3 weeks we built a classroom in Kito, a poor village in the north-east part of the country. We raised 11.000 € to pay for the costs of the project.

📖 Publications

Blog posts

- **Generating fake data with pandas, very quickly.** Published on [Towards Data Science](#), a Medium publication.
- **What to expect when throwing dice and adding them up.** Published on [Cantor's Paradise](#), a Medium publication.
- **Can neural networks predict the stock market just by reading newspapers?** Published on [Quantdare](#), a blog run by data scientists at ETSFactory.
- **Scraping Google Search (without getting caught)** Published on [Medium](#), about a scraping method resilient to IP blocking.

Conferences and presentations

- **Spatial Data Science Conference 2022:** gave a talk about CARTO Analytics Toolbox, I library of SQL functions for spatial analytics.
- **Webinar - Predicting consumer demand on Black Friday:** done in collaboration with Safegraph ([presentation](#) and [blogpost](#)).

🎓 Education

Young Talent Path Assessment Boot Camp, IESE, Barcelona

July 2021

Together with over a hundred young professionals, I was introduced to IESE's case method and programs in a high paced, practical setup.

MSc, Data Science, Universidad Politécnica de Madrid, Madrid

September 2019 — June 2020

Top 5%. Awarded with [price](#) to best academic record. Master thesis to be presented soon.

MSc, Computer Science, KTH Royal Institute of Technology (unfinished), Stockholm

September 2018 — March 2019

BSc, Information and Communication engineering, KTH Royal Institute of Technology, Stockholm

September 2015 — June 2018

Top 5% – GPA: 4.26 . [Bachelor Thesis](#): Speed comparison of convolutional neural networks in TensorFlow