



Key skills

- Proficiency in: **statistics**(Advanced), **Excel**(Advanced), **C++**(Basic), **Data scraping**(Intermediate), **Power BI** (Intermediate).
- Operating systems: **Unix/Windows**.
- Languages: Spanish (**native**), English (**Upper intermediate , B2**).
- Databases: Basic knowledge of **SQL** NosQL.

Programming

- Highly advanced: **Fortran**, **Python** (expertise in NumPy, Pandas, Cython, PyTorch, Keras, Scikit-Learn, Asyncio, OpenCV, etc).
- Advanced: FreeFEM++, **L^AT_EX**.
- In progress: **JS**, **PHP**, BigQuery, R.

MOOCs

- Data Analyst **Nanodegree**, on Udacity.
- Deep Learning with **PyTorch**, on Freecodecamp.
- **Quantum Mechanics and Quantum Computation** on BerkeleyX.
- Foundations of **Data Analysis**, on **UTAustinX**.
- Data Structures and **Algorithms in Python**, on Freecodecamp.

Interests

- Artificial intelligence.
- Real Time Computer Vision.
- Business intelligence.
- Rest APIs.

Education

2016 – 2021 Bachelor's degree **in Physics** at *Universidad de Murcia*, Murcia
Specialization: Advanced simulations.

Work Experience

Feb. 2019 – **Mechanics Lab. Intern** at *Facultad de Química*, Murcia
Jul. 2019

- Developed software for the Arduino platform that allowed the capture of **infrared data** to analyze the movement of chaotic systems.
- Merged the captured RAW data into dataframes, then stored that **Big Data** in **BigQuery**.
- Used bayesian analysis and machine learning **reinforced learning models** to obtain the real coordinates of the objects.

Jun. 2015 – **DATA WAREHOUSE MANAGER** at *Agrotul Green*, Totana
Sept. 2017

- Ensured that project **milestones** and **department goals** were met and adhered to approved budgets.
- Planned needed resources for the operation delimiting peaks of activity via ERP software (Dynamics 365).
- Guaranteed date compliances.
- Managed **ETL data proccesing**.
- Developed processes for auditing warehouse **data quality**.

Jun. 2009 – **WAREHOUSE ASSISTANT** at *Agrotul Green*, Totana
Jun. 2015

- Preparation of orders with AlierSGA.
- Label batches.
- Stock reception and control.

Personal projects

2021 – ongo- **Backlog Dash**

ing Made in **Python & Streamlit**. Uses **scraped** game data to recommend similar videogames (via **K-nearest algorithm**), sorting the results by score. Available in the following [link](#).

2020-ongoing **Self-maintained Covid Dashboard**

Made in **Python & Streamlit**. **Self-maintained dashboard** that plots the global spread of Covid-19, also letting the user to check the **epidemic situation** per country and their **historic data**. Available on my portfolio in the following [link](#).

2019 – 2020 **Mask detector**

Deep Learning model using **Haar cascade classifiers** and **VGG-19** to integrate a model which discerns if people in static images or a video feed are complying with the **safety distance** and wearing a mask, in **real time**. Available on my [portfolio](#).

Vorticity simulation on viscous fluid

2D Navier Stokes simulation using the **Finite Element Method** via FreeFEM++. Article PDF can be found on [here](#).

SimuMatter

Simulation of Neutrons interacting with **organic matter** in Fortran, saving the particle trayectories obtained and then cleaning & plotting the results on a **python notebook**. (Pending: LaTeX formulas). Partly available on my portfolio in the following [link](#).