

# David Orive-Miguel

*PhD in applied mathematics*

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Webpage: <https://dorive.github.io/>

GitHub: <https://github.com/dorive>

## Professional summary

**Results-driven** data scientist with a strong background in applied mathematics and extensive experience in **statistical and quantitative modeling**. Skilled in **data science**, **machine learning** and **Python+SQL** programming. Check my [webpage](#) and [GitHub](#) repository for more information.

## Work experience

- 01/2020– **Data scientist and quant trader**, *Arfima trading*, Madrid (Spain).
  - Now Quant research of algorithmic trading strategies using advanced data analytics. Broad knowledge of financial and energy industry. Some of my key achievements are:
    - Leading a cutting-edge market-making project by developing automated algorithmic portfolios in C#.
    - Huge experience pricing and modelling quantitatively market dynamics using Python.
    - Predictive modelling for short-term fixed-income futures market.
    - Familiar programming SQL queries and dealing with Bloomberg and Refinitiv data pipelines.
    - High quality data visualization to gain comprehensive market understanding (matplotlib + seaborn).
- 10/2016– **PhD in biomedical imaging and signal processing**, *CEA*, Grenoble (France).
- 10/2019 Development of new diffuse optical tomography algorithms and signal processing techniques for in-vivo neuromonitoring of adults and newborn infants. Marie-Curie fellowship under BITMAP EU project.
  - Research and developed complex reconstruction algorithms in Matlab. Fully tested at in-vivo experiments.
  - Published several research papers and participated at international conferences in Europe and USA.
  - Research secondments at labs from United Kingdom, Italy and Germany.

## Education

- 2018–Now **Degree in physics**, *UNED*, (Spain).
  - Part-time while I work at my current job. Completed more than 50% of the courses.
- 2014–2016 **Master's degree in industrial mathematics**, *University of Santiago de Compostela*, (Spain).
  - Mathematical modelling of industrial processes. Thesis: signal processing for NMR spectroscopy (Mestrelab).
- 2010–2014 **Degree in computer science/engineering**, *University of Deusto*, (Spain).
  - Software design, machine learning and scientific programming.
  - Erasmus** experience in Pázmány Péter Catholic University (Hungary) - Machine learning and neural networks.

## Programming

**Python** (Pandas + Scikit-learn + Matplotlib) (advanced), **Matlab** (advanced), **SQL** (medium), **pySpark** (medium) and **C/C#** (basic).

## Software skills

**Office:** Excel and LaTeX. **BI tools:** PowerBI. **OS:** UNIX and Windows. **Version control:** Git.

## Three key soft skills

- Proficient in learning and **adapting rapidly to new fields**,
- Ability to do **autonomous work**,
- **Good communication skills** in different languages.

## Languages

**Spanish** (native), **English** (C1-C2) and **French** (B1).