David Orive-Miguel

PhD in applied mathematics

✉ *davidorive@gmail.com*
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–Now **Data scientist and quant trader**, *Arfima trading*, Madrid (Spain).
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 for relational databases.
- High quality data visualization to gain comprehensive market understanding (matplotlib + seaborn).

10/2016–10/2019 **PhD in biomedical imaging and signal processing**, *CEA*, Grenoble (France).
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 Pázmany 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).