David Orive Miguel

PhD in applied mathematics

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.

Work experience

01/2020— **Data scientist and quant researcher**, *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.
- Huge experience pricing and modelling quantitatively market dynamics.
- Predictive modelling for fixed-income futures market.
- Familiar programming SQL queries for relational databases.
- High quality data visualization to gain comprehensive market understanding.
- 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.
 - 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 degree in industrial mathematics**, *University of Santiago de Compostela*, (Spain). Mathematical modelling of industrial processes. Thesis: signal processing for NMR spectroscopy (Mestrelab).

inathernatical modelling of industrial processes. Thesis, signal processing for MMR spectroscopy (MR

2013–2014 **Erasmus experience**, *Pázmany Péter Catholic University*, (Hungary).

Machine learning and mathematical optimization.

2010–2014 Degree in computer science/engineering, University of Deusto, (Spain).

Software design, machine learning and scientific programming.

Programming

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

Software skills

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

Three key soft skills

- o 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).