ELISENDA ORTIZ

Data Scientist

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github.com/elisendaortiz

in Elisenda Ortiz



Data Scientist/ Mathematical Modeller

VesselsValue Ltd

Jan 2023 - Present, UK

VesselsValue Ltd is a leading supplier of financial and technical data to the maritime and aviation industries. As a Mathematical Modeller, I use statistics and machine learning to conduct research and development of new valuation models. I work closely with commercial staff, software developers and data analysts to design data products that meet the needs of a sophisticated client base. My main responsibilities include:

- Liaise with stakeholders to establish product use case.
- Conduct feasibility analysis understanding and considering data requirements
- Model design and evaluation of performance
- Prototype of deliverable outputs
- Maintain internal technical documentation

Data Science Fellow

S2DS - Pivigo

July 2022 - Aug 2022, UK (remote)

In this role, I worked within a small team on developing a data-driven classification algorithm for vessels stoppages for our UK-based client VesselsValue Ltd. Tasks included:

- Creating a data cleaning ML pipeline in a collaborative fashion through the use of git.
- Carrying out exploratory data analysis and feature engineering while growing domain knowledge.
- Developing a Neural network classifier and conducting performance bench-marking.
- Setting actionable goals and adjusting priorities fast to deliver a viable product in 5 weeks.



MOST PROUD OF



Awards

Highest grade of Excellent *Cum Laude* for PhD thesis. Won two pre-doctoral scholarships for two separate PhDs.



Collaboration

Managed successful collaborations with international teams overcoming challenging time-zone differences and boosting remote work culture.



Project management

Exceptional time administration and communication skills. Enjoy owning the full life-cycle of a project, removing obstacles and meeting objectives.



Publications: Google scholar 3/5 first author.

EDUCATION

PhD in Physics of Complex Networks University of Barcelona, Spain, 2022

PhD in Computer Science*
Victoria University, New Zealand, 2017
*Voluntary withdrawal

MSc in Advanced Physics University of Barcelona,2016

Course designer - Physics

Gauss online

May 2021 - July 2022, Philippines (remote)

Gauss online is a virtual academy offering bachelor students of STEM disciplines support in mathematics and physics via video-tutoring. In this role, I lead the design, documentation and content creation of a freshly started Physics division. I became proficient at communicating complex ideas and processes adjusting to a range of levels. I also supervised the accuracy of knowledge transfer at different stages from raw lessons until the final video-product.

Assistant teacher - Computational Physics

University of Barcelona

Sep 2018 - June 2019, Barcelona

Provided critical guidance to undergraduate students with zero prior coding experience on how to approach and solve practical coding assignments in Fortran. Also developed a private semi-automated system for faster marking.

TECHNICAL SKILLS

Programming languages

- Python (advanced)
- Fortran (advanced)
- C++ (basic)
- · Bash (basic)
- SQL (ongoing)

Data handling

Pandas, Numpy, Scikit-learn, Scipy, Networkx, Sympy, Matplotlib, Seaborn, Jupyter.

Machine learning

EDA, data visualization, regression, classification (logistic, random forest, SVM, Naive Bayes), clustering, neural networks, social networks, embedding, topic modeling, Agent Based simulations.

Mathematics

statistical analysis, probability, stochastic processes, non-linear dynamics, graph theory.

Software & tools

Git, ssh, virtual environments, cluster computing, Linux.

STRENGTHS

Resourceful Creative Hard-working

Eye for detail Proactive Confident

LANGUAGES

English	••••
Spanish	••••
Catalan	••••
Japanese	••••
Tagalog	•••••

HOBBIES

Tropical plants Aviation Kitesurfing
Sailing Motorcycle roadtrips Sunsets
Traveling