Léa MARINGER



EDUCATION

Paris Dauphine University

Master MODO (Modelling, Optimization, Decision and Organization)

Paris, France

Oct. 2023 - June 2024

Modelling in Operational Research, Mathematical Programming, Preferences Modelling, Computational Complexity Theory, Algorithmic Game Theory, Stochastic Programming, Decision under Uncertainty.

CY Tech Sept. 2021 - June 2024

MEng. of Applied Mathematics - Data Science specialization

Cergy, France

Statistics, Probabilities, Optimization, Complexity, Signal Processing, Time Series, Compressive Sensing, Procedural, Functional and Parallel Programming, Machine Learning, Artificial Intelligence etc. but also accounting, economics and ethics.

Lycée Jean-Moulin Sept. 2019 - June 2021

B.Sc of Mathematics, Physics and Computer Science

Forbach. France

Advanced courses in Mathematics, Physics and Computer Science, to pass the highly competitive entrance exams, leading to the most prestigious schools of Science and Engineering in France called "Grandes Ecoles".

Experience

CoDAlab - Polytechnic University of Catalonia

May. 2023 - Aug. 2023

Researcher & Data Scientist - Internship

Barcelona, Spain

I worked on fault detection in wind turbines using machine learning and domain adaptation. Especially, I studied real SCADA data from a wind turbine farm and data collected in the lab from a scaled Jacket-type wind turbine foundation.

June 2022 - Aug. 2022 namR

Data Engineer - Internship

Paris, France

My role was to explore, clean and analyse data from open data to produce useful and completed data about climate, green transition and energy retrofitting. I also worked on automating pipelines on data to lead to more reliability and to standardize some steps of data production process.

Projects

Explainability of Deep Learning models in medical images (Ongoing)

Oct. 2023 - Present

End-of-study project. Exploring explainability methods to understand Deep Learning models predictions for a localization problem on hand images.

Statistic study of Google quarterly revenue

Oct. 2023

Differencing and seasonnal differencing, modelling and forecasting with ARMA, ARIMA and SARIMA models, KPPS, Ljung Box, Shapiro-Wilk and Student's tests (R).

Markowitz Portfolio Optimization

Dec. 2022 - April 2023

Analytical solutions of optimization problems with different constraints, Monte Carlo simulations, numerical resolution algorithms applied to CAC40 assets and other portfolios.

Technical Skills

Languages Python (Numpy, Pandas, Scikit-learn, TensorFlow, Scipy, Matplotlib, Seaborn, tkinter),

SQL, R, OCaml, C, C++, bash, JavaScript, HTML, CSS, LATEX

Software & Tools Git, Excel, Dataiku, Microsoft VS Code, Anaconda

Languages

Native proficiency Limited working proficiency French: German: English: Full professional working proficiency Spanish: Limited working proficiency