# Internship Description

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| **Internship title:** Optimisation and Trading analysis intern | |
| **Reports to:** Optimisation & Trading Analytical Team Manager | |
| **Location:** Paris | |

**Company information**

EDF Trading is a leader in the international wholesale energy markets. The company manages a portfolio of assets which give it the ability to source, supply, transport, store, blend and convert physical commodities around the world. These capabilities enable EDF Trading to deliver essential asset optimisation services, risk management and wholesale market access to the EDF Group and its third party customers, helping them to realise the value inherent in their asset portfolios.

EDF Trading is active in the electricity, natural gas, LPG, oil and environmental products markets. It is also active in the LNG and coal and freight markets via JERA Global Markets* ("JERAGM*"). EDF Trading is one of the largest wholesale market traders in Europe for power and gas. In North America, EDF is one of the leading marketers of gas and power, one of the main providers of generation services for power generation companies and a leading energy retailer for large commercial and industrial customers.

*JERAGM is a joint venture between JERA Co., Inc. (66.67% through JERA Trading International Pte. Ltd. equity) and EDF Trading (33.33% equity). JERAGM operates one of the largest seaborne energy portfolios in the world.

EDF Trading is a 100% owned subsidiary of EDF SA., one of the world's biggest electricity generators and a leader in low-carbon production.

EDF Trading has around 800 employees with key offices in London, Paris, Singapore and Houston.

For more information, please visit www.edftrading.com.

**Department**

Optimisation & Trading Analytical Team

The Optimisation and Trading Analytics Team is part of Energy Market Analytics and is located in Paris and London. The core purpose of the team (10 people) is the development of complex market forecasting models and asset optimisation tools to support EDF Trading proprietary activity and EDF Group portfolio optimisation. The team efforts are directed towards both the Paris based activity in the short-term electricity markets as well as the longer-term horizon and other commodities traded from London. The team works in proximity with the trading desks and other analyst teams in both locations.

**Position purpose**

The main objective of the internship is to improve EDFT pan-European Intraday price forecasting model. The increase of intermittent renewable energy sources in Europe has greatly increased the relevance of the Intraday market where electricity for the next hour and up to the next day is traded. The model supports the optimisation of EDF Group portfolio and EDFT's proprietary trading activities in this market. The intern will work closely with other analysts and traders to refine market modelling and implement new features. The work will involve deep market analysis (market mechanisms with associated price impacts), translating improvement ideas into the optimisation algorithm and backtesting its performance using systematic strategies.

This is a great opportunity to work on a model used by the largest intraday trading team in Europe.

**Main responsibilities**

- Design and test improvement ideas for the Intraday price forecast
- Analyse results and present them in discussions with analysts and traders
- Refine approach based on feedback
- Ensure implementation in the model is robust before deployment in production

**Personal and professional requirements**

**eDF Trading**

- Interest in energy markets and quantitative trading
- Strong quantitative and analytical skills
- Strong Python coding skills (object-oriented programming) – C# is a plus
- Some knowledge on constraint programming
- Good communication skills
- Autonomy, ability to work in a fast-paced environment

**Duration:**           6 months, starting between March and April 2022
**Hours of work:**     9am – 6pm, Monday to Friday

Apply at the link below:

https://lde.tbe.taleo.net/lde02/ats/careers/requisition.jsp?org=EDFTRADING2&cws=40&rid=878