



Pegase: short-term power and gas asset optimization

Sustainability Solutions: EMEAI

[ENGIE Impact](#) delivers sustainability solutions and services to corporations, cities and governments across the globe. Comprised of existing and proven ENGIE Group businesses, ENGIE Impact brings together a wide range of strategic and technical capabilities, to provide a comprehensive offer to support clients in tackling their complex sustainability challenges from strategy to execution. [Why join us?](#)

As a division of Engie Impact, the Advanced Analytics team focuses on the development of tools that are rooted in operational research (linear and nonlinear optimization) and machine learning. These tools support internal and external consultants and their applications cover for example: the operations of a district heating & cooling network, finding optimal investment pathways, designing net-zero factory roadmaps, and controlling hydro production.

Among these powerful tools, Pegase is an optimization software which models portfolios of gas and/or power assets on a short to mid-term horizon. The Advanced Analytics team develops the mathematical model of the tool which supports dispatchers and traders' operations going from the power day-ahead production to gas storages strategies over several months or years.

Ready to act Right Now, for Tomorrow?

Job Description

As part of the Pegase team, the Operational Research Analyst (Internship) will have to work on the performance of the solving process for the gas storage model. This task includes understanding the client needs, writing or improving models in GAMS-Python, designing heuristics to speed up the solving time, testing and validating its new methods.

The Developer (Internship) will have to work on the reporting part of the process. Its main task will be to speed up this process by refactoring code or rewriting Python code into Cython and testing its new developments. He will need to be able to understand clients' business and needs as well as the optimization model.

Function

As **Operational Research Analyst or Developer (Internship)**, you will contribute to develop our activities on Pegase by:

- Defining, developing and validating optimization models in operational research where the goal is to improve assets management
- Ensuring a good integration of the mathematical model into the client environment (run as a service) or in a complete tool
- Producing dynamic visualizations of the results of our models

Do you tick all the boxes?

We are looking for **talented and motivated people** to create the future of **sustainability transition**. Join a rewarding and flexible work environment that encourages innovation and creativity and help us meet the energy challenges of today and tomorrow.

- You are a master student in engineering with a solid applied mathematics background, a good basis and interest for IT (ideally Python for computer science)
- Having a good knowledge of mathematical modelling language is a plus (GAMS, ...)
- You have good analysis capabilities, easy to manipulate complex concepts
- Having knowledge of energy markets or operations is an asset
- You are fluent in English
- You are rigorous, autonomous and can take initiatives
- You have strong communication skills and are able to convince
- You enjoy teamwork in an agile environment

Our offer

- An innovative working environment (NWOW) with a real flexibility
- The opportunity to discover a large group while remaining in a startup atmosphere
- Supported and coached by an international Agile team to improve your competences in Operational Research and IT
- This mission may lead to a stable, full-time position in an internationally reputed company
- Mission location: Louvain-La-Neuve, Brussels (Belgium) or Paris (France)
- Duration: 4 to 6 months depending on the topic
- Allowance
 - Brussels: house allowance of ~500 €/month, refund of public transport
 - Paris: salary of ~1200 €/month
- Remote work: 2 days of homeworking per week allowed
- Start date: beginning of 2025

How to apply?

Send your CV and cover letter to internships-AA@engie.com

Equal Employment Opportunity

All employment decisions shall be made without regard to age, race, creed, color, religion, sex, national origin, ancestry, disability status, veteran status, sexual orientation, gender identity or expression, genetic information, marital status, citizenship status or any other basis as protected by federal, state, or local law.