SIMULATION AND PERFORMANCE PREDICTION ENGINEER

About AYRO

AYRO is a French, Deep Tech startup, with the global ambition of enabling the decarbonization of the shipping industry worldwide. We design, build and sell the OceanWings®, enabling commercial vessels to reduce their fuel consumption and therefore their CO2 emissions by up to 50% using the power of the wind. By 2050, shipping could represent 15% of all CO2 emissions thus the emission reduction potential of our solution could be measured in Gigatons of CO2 in the next 5-10 years.

Our OceanWings 363 have recently been installed on the Canopée shipping vessel who will transport the Ariane 6 rocket from Europe to Kourou in French Guyana and many other large projects are in the works.



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Job Overview

As part of the performance team at AYRO's Paris offices, you will be involved in carrying out performance studies commissioned by our clients for projects involving the installation of Oceanwings® on their retrofit or newly built vessels. The aim is to address in a holistic way the impact of integrating a wind propulsion system on a vessel to draw conclusions on its economic, ecological and regulatory relevance in the context of a specific operational profile.

You will also be involved in predicting the performance and optimizing wing settings on ships already operating with Oceanwings®.

With a degree in engineering, you are passionate about technological challenges and have a good knowledge in naval architecture. You are familiar with the operation of a wind-powered vessel and have a solid background in programming using scientific tools (mainly Python, and ideally C++, C# and Java).

Main Missions

In cooperation with the engineer in charge of the performance division, your tasks will include:

- Carrying out "pre-sales" studies including the integration of Oceanwings into ship projects (naval architecture, configurations), the construction of aerodynamic models, VPP modelling and routing optimization.
- Identification of the critical phases of the process and the expected outputs; proposal of appropriate standardizations, validations and visualizations to process the data.
- Developing and improving physical models for predicting the performance of ships equipped with OWs and competing solutions.
- Framing and participation in projects to develop medium-term analysis and performance tools.

Profile & Skills required

- Ability to analyse and summarize
- You are creative, autonomous, reliable, curious and dynamic.
- Knowledge of the maritime environment.
- Proficiency in programming (Python, etc.), ideally familiar with CAD (Rhino) or drawing (AutoCAD).
- Excellent level of English and French

What we offer

- Create a completely new product that will have a real impact on the environment and join a team with strong motivation to achieve that.
- Participate and assist in the launching of our projects in the coming months.
- Reinforced by the expertise of your colleagues and supervised by a lead engineer, you will take
 your own technical decisions.
- You will be responsible and autonomous on your subjects, the team counting on your expertise.

Conditions

- Permanent position (CDI) based in Paris, possible travels in France and abroad.
- Work in a pioneer spirit and substantial growth.
- Availability: as soon as possible.
- Remote work: 6 days/month possible even during the trial period and to be organized freely.
- Please send your CV to hiring@ayro.fr
- Recruitment process with several interviews (via recruitment agency).



JOIN US AND GIVE YOUR CAREER WINGS!

We are a team of enthusiastic experts committed to unlocking the decarbonisation of global maritime transport through the use of an innovative wind-powered solution. At AYRO everyone is invited to combine their talent and imagination with cutting-edge spirit to develop tomorrow's maritime industry.

If you wish to create the change, please send your resume and cover letter with

Ref: HR PERF 002 to hiring@ayro.fr