

# Junior Offshore Structural Engineer

**Company:** WavEC Offshore Renewables

**Location:** Lisbon, Portugal (Hybrid work regime)

**Experience Level:** Entry-level (0-3 years)

**Start date:** March

**Employment Type:** Full time

**Deadline for applications:** 31/01/2024

## **About WavEC Offshore Renewables:**

WavEC Offshore Renewables is a private non-profit organization, with a strong R&D background, dedicated to unlocking energy transition through the development of engineering solutions and consultancy services to the marine renewable energy sector, particularly, floating wind. Founded in 2003, WavEC has cemented its position as a leading international authority on the topic, supporting the full lifecycle of marine renewable energy technologies, from the conceptual design and tank-testing to the licensing, permitting, construction, deployment, and operation. You can find more information about us on our [website](#), [LinkedIn](#), [X](#), [Facebook](#), and [Youtube](#) channels.

## **Role Description**

This is a full-time, hybrid role for a Junior Offshore Structural Engineer located in Lisbon, with flexibility for some remote work. The Junior Offshore Structural Engineer will be responsible for providing technical support on offshore structural design projects, developing models for structural analysis, and participating in project implementation and delivery. In this role, the candidate will primarily contribute to the development of a digital twin for the construction stage of an innovative floating offshore wind platform. Among other functionalities, the digital twin will allow the real-time monitoring of the structural integrity of the floater.

## **Key Responsibilities:**

The candidate will integrate a talented team and develop algorithms and python-based solutions, machine learning techniques, and data visualization & analysis for the structural and environmental monitoring of the floating wind platform, in real-time. Environmental parameters such as currents, wind, and waves, noise and water turbidity, and biofouling

exposure shall also be monitored. The Junior Offshore Structural Engineer will also prepare technical reports, specifications, and drawings, and perform site visits as necessary.

**Required Qualifications and Skills:**

- Master's degree in mechanical, industrial, naval, or civil engineering (or equivalent)
- Proficiency in Python 3.x programming.
- Experience in BIM / AUTOCAD
- Experience in offshore structural design and analysis (offshore wind energy related is a plus)
- Experience with structural analysis software, such as ANSYS, ABAQUS, SAP2000, or equivalent
- Growth and team player mindsets with a proactive attitude.
- Excellent proficiency in both written and spoken English.
- Excellent problem-solving and analytical skills, with the ability to work independently and in a highly-collaborative environment
- A genuine interest in contributing to the offshore renewable energy space and the decarbonisation of the power sector.

**Bonus Skills:**

These skills are considered a bonus, not a necessity, so don't worry if you don't check every/any box. However, demonstrating a number of these abilities would give your application an edge.

- +2 years of experience in offshore renewable development and/or naval construction.
- Experience in AI, Machine Learning, Unsupervised Learning, and Computer Vision models.
- Experience in digital twins / port operations is seen as a plus.
- Portuguese speaking is a plus.

**Application:**

Candidates should submit their applications by email to [rh@wavec.org](mailto:rh@wavec.org), including in attachment their CV and short introduction letter. Emails should be addressed to Francisco Correia da Fonseca and include "Junior Offshore Structural Engineer" in the subject line.

**If you feel that this is for you, we are looking for you!**