

Senior Ocean Engineer Position | Full Time | Berkeley, CA

CalWave Power Technologies Inc. is currently seeking a dynamic and innovative individual to fill the role of Senior Ocean Engineer. In close collaboration with several lead engineers you will have the opportunity and responsibility to guide the project as the lead senior ocean engineer.

To further advance the current wave energy converter prototype to a full commercial scale unit, we are looking for a candidate to join our team in Berkeley fulltime. The candidate should have extensive expertise in offshore/marine and mechanical engineering and demonstrate superior skill in designing marine structures, project development, and design of complex mechanical systems. Primary equipment includes hull structures, moorings and anchors, linear/rotary mechanical actuation such as hydraulic circuits and winches, ballast tanks and SCADA system.

Responsibilities:

- Design of hull structures, Mechanical & Electrical Systems Analysis (HM&E) all-source engineering. Conduct and approve design loads, risk assessment, life assessments, associated engineering calculations for offshore structures and mooring systems.
- Calculation and preparation of mechanical equipment, specifications and data sheets, RFQ's, technical bid summaries, and purchase recommendations.
- Reviews mechanical equipment vendor drawings, and data. Interfaces with suppliers, clients and allied engineering disciplines.
- Conduct Front-end engineering design (FEED) studies, detailed design, field installation, and construction of offshore structures.
- Development and setup of supplier partnerships including component requirements/specification/reliability design and BOMs.
- Lifecycle analysis of mechanical components and structures for a marine application
- Engineering activities include stress and fatigue analysis using FEM and fatigue and material testing with physical models.
- Experience with load, strain, and other measurement systems and data analysis.
- Prepares construction/installation scopes of work for mechanical equipment. Ability to perform quality reviews for detailed engineering documents and specifications.

Qualifications:

- Minimum qualifications BS in mechanical, ocean engineering or ocean energy related field (naval architecture, shipbuilding, etc.)
- Minimum of 4 yrs experience in the offshore industry (ideally offshore, offshore wind, tidal or ocean energy)
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- Advanced understanding of hydrodynamics, nonlinear dynamics, motions, steel structures, stability and station keeping.
- Excellent interpersonal and organizational skills and flexible and adaptive approach to work.
- Passionate team worker with self-starter and entrepreneurial spirit; Driven, takes ownership of issues and drives them to completion.
- Able to work unsupervised or as part of a team.
- Proficient with CAD (SOLIDWORKS, CATIA or others) and FEA (ANSYS or others)
- Familiar with certification codes (IEC, ABS, DNV GL, etc.)
- Candidates must be able to legally work and reside in the US, without sponsorship.
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Bonus Qualifications:

- Experience with technology development and R&D to bring new offshore technologies to the market.
- Experience with project development and execution of offshore electricity and power generations such as offshore wind, tidal energy, wave energy, others.
- Experience in numerical design of offshore structures/naval architecture/ vessels planning tools (e.g. with MATLAB, AQWA, WAMIT, Star CCM+, GHS, DNV Sesam suite, HydroD, GeniE, DeepC, Sima, Simo, Riflex, Rhino, Excel, Matlab, Word or other).
- Graduate degree and/or relevant (MHK) publications.

Company Benefits:

- Competitive salary
- Dynamic and impactful work environment
- Generous equity at an early stage company
- Medical benefits
- Snacks & coffee
- Onsite Machine Shop

Contact information:

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