

Job Opportunity: Simulation Software Engineer

Kelson Marine Co. is hiring up a full-time simulation software engineer. An ability to work effectively with teammates is essential. Strong programming skills and experience with developing and modifying software for simulating flexible ocean structures is required. A grasp of the fundamentals of mechanical, ocean, or civil engineering is desired. Familiarity in fluid-structure interactions will be highly advantageous.

The engineer will adapt existing open-source simulation tools for advanced ocean engineering applications, and support research and commercial projects in ocean energy and aquaculture. Kelson employees work in small teams with co-workers and clients. The new hire will use software development and programming, and technical presentation and report writing to help solve challenges associated with producing food and energy from the ocean. Active professional development will be both expected and facilitated by Kelson Marine.

Occasional domestic and international travel is expected, post-pandemic. This will typically comprise 3-4 trips per year for site visits, project meetings, and conferences.

Location

Kelson is headquartered on the Portland Fish Pier in Portland, Maine, USA. Our working model is built around extreme teamwork. Therefore, *the majority* of working hours are in the office. But for the rest, employees decide when and where they work best.

Skills

Required:

- Strong programming and software development skills
 - C, C++
 - MATLAB/Python
 - CUDA
- Understanding of Finite Element Analysis (FEA)
- Clear, concise, and purposeful communication in formal and informal settings.

Desired:

- Engineering analysis of ocean energy, aquaculture, and other marine systems
- Understanding of wave mechanics, nonlinear dynamics, and fluid-structure interactions
- Experience with Computational Fluid Dynamics (CFD)
- Experience with ocean engineering software tools (MoorDyn, ProteusDS, OrcaFlex, WEC-Sim, NEMOH, OpenFOAM)

Education and Experience

Required:

- 3-10 years of experience programming dynamic simulation software
- Authorized to work in the United States.

Desired:

- PhD in ocean, mechanical, civil engineering, or computer science.

What We Offer

- Competitive salary, based on experience and qualifications, PLUS
- Performance-based bonus program.
- Health insurance reimbursement.
- Four (4) weeks paid parental and medical leave.
- 21 days paid time off per year.
- Flexible schedule
- A small team environment where every member impacts the future of the company.

Who We Are

At Kelson Marine, we like to solve hard problems in ocean engineering. We partner with clients—federal agencies, universities, or businesses—to solve the challenges of producing food and energy in the unrelenting ocean. Born on New England’s working waterfront, Kelson is a startup company that combines advanced engineering tools and firsthand experience on the sea to deliver innovative and reliable systems.

Kelson’s core value is to treat people how you’d like to be treated. For our clients, we tell it how it is, we get things done on time, and we always listen. For our teammates, we share knowledge eagerly, we work earnestly for each other’s success, and we work toward our collective goals with autonomy and camaraderie.

www.KelsonMarine.com

How to Apply

Email HR@KelsonMarine.com. Include the following:

- Cover letter
- Resume