



JOB DESCRIPTION

Software Engineer:

Seatrec has an immediate opening for a software engineer to support the software development and visualization of both the engineering and science data from Seatrec's novel ocean robots and sensors. The ideal candidate will be a motivated self-starter with several years of relevant post-undergraduate work experience, demonstrated technical capabilities and outstanding communication and interpersonal skills. The successful applicant will work with the Seatrec team on multiple simultaneous tasks to support product development, testing and evaluation, data analysis, visualization and web publishing to meet customers' needs from research, defense and industry.

If you love software engineering and are committed to the sustainability of the oceans, this is a perfect opportunity to make your impact on the world.

About Seatrec:

Seatrec designs and manufactures energy harvesting systems that generate electricity from naturally occurring temperature differences in the environment. Seatrec's first commercial product is used to power deep water oceanographic research instruments, resulting in the most scalable, cost-effective deep ocean data collection possible. Our goal is to expand our range of products beyond oceanographic applications and to continue developing innovative clean energy solutions. The company is headquartered in Vista, CA. Visit us at seatrec.com and [@seatrecinc](https://twitter.com/seatrecinc).

Position Responsibilities:

- Design, development, and maintenance of customer facing web portal to manage and display ocean related data and instrument engineering health data
- Develop monitoring strategies to detect anomalies in instrument behavior
- Write monitoring and control software for laboratory prototypes and test setups
- Assist in planning field testing of prototypes and development systems
- Specify and develop embedded code for control, monitoring, and communications of ocean-going instruments
- Apply engineering principles and practices to reduce time to market and exceed users' expectations
- Work with minimal supervision on assigned tasks to meet defined deadlines
- Engage constructively and professionally with a small and dynamic engineering team working on multiple simultaneous projects



Position Requirements:

- ❑ BS or equivalent in computer science, software engineering or related field from an accredited university
- ❑ At least 2 years of relevant post-undergraduate work experience
- ❑ Front-end website design and development experience with JavaScript (React, Node, Express)
- ❑ Back-end website database development and management (MongoDB/NoSQL)
- ❑ Python experience with focus on scripting, data management, and data visualization
- ❑ Use of DevOps tools such as Git, CI pipelines, Cloud data/compute providers (Digital Ocean), DNS / domain registration
- ❑ Exceptional written and verbal communication skills
- ❑ Valid driver's license

Desirable Capabilities:

- ❑ System-design & graphical programming languages (LabVIEW, MATLAB)
- ❑ Linux/Unix-like operating system and kernels
- ❑ System networking interfaces, data transfer protocols (ftp, ssh, rsync)
- ❑ Embedded C and firmware engineering principles, RTOS, communication protocols (UART, I2C, IP), memory management
- ❑ Practical digital electronics laboratory skills e.g., soldering, breadboarding, cabling, common power and hand tools
- ❑ Familiarity with the ocean sciences, related underwater industries, and unique marine-environment engineering challenges
- ❑ US Citizenship or permanent residence and the ability to travel internationally

This is a full-time position including traditional PTO benefits and a retirement plan (SIMPLE IRA with up to 3% matching contribution). The successful candidate will work with the Seatrec team at Seatrec's Vista, CA facility. To apply, please submit your resume and cover letter to jobs@seatrec.com.

Equal Employment Opportunity: Seatrec provides equal employment opportunities to all employees and applicants for employment and prohibits discrimination and harassment of any type without regard to race, color, religion, age, sex, national origin, disability status, sexual orientation, or any other characteristic protected by federal, state, or local laws.