VERNE

Hydrogen Storage Engineer

Verne is developing innovative hydrogen technology that enables heavy-duty transportation (trucks, ships, and planes) to operate with zero emissions. Heavy-duty transportation is vital to the functioning of our global society, but is also responsible for 10% of global greenhouse gases. If vehicles switch from fossil fuels to green hydrogen, they can operate without producing any emissions. However, two challenges prohibit this transition: storing enough hydrogen onboard to power their operations, and access to this hydrogen to refuel.

Verne is bringing to market two technologies that simultaneously address these challenges. First, Verne has developed a new way to increase the density of hydrogen gas. This equipment will be installed at refueling stations, converting low density hydrogen into ultra-high density hydrogen fuel. Second, Verne has developed a way to store this high-density hydrogen onboard vehicles. Together, these two technologies more than double the amount of hydrogen that can be stored onboard vehicles, doubling vehicle range and allowing them to carry a full payload. With Verne's technology, vehicles can maintain current operations while eliminating harmful emissions.

Verne has made significant strides toward this massive industrial transformation, and is in the midst of pilot program design with vehicle manufacturers. Verne has gained the support from leading technology institutions, including funding from MIT, Caltech, and Stanford, and all three co-founders were selected as fellows in the inaugural cohort of Breakthrough Energy's new Fellowship program, supported by Bill Gates.

What you'll do:
As a Hydrogen Storage Engineer you will conduct detailed design and analysis for our hydrogen storage systems, playing a vital part of our engineering team.

Specifically, you will:

- Conduct structural, dynamic, and thermal analysis on our established designs
- Support the detailed system design of our next generation tank systems
- Lead first-of-kind prototype builds for some of our storage systems
- Support our prototyping and testing of our storage tanks and storage tank systems
- Champion a culture of safety and high-quality work across design, development, and implementation

Key qualifications:

- Degree in Mechanical Engineering
- 3+ years of hands-on building, prototyping, testing, and integrating pressurized or cryogenic hydrogen storage systems
- Experience with computer-aided design and stress analysis, including using Solidworks, Ansys Fluent, Matlab, and Abaqus
- Excellent learner, listener, and team player
- Interest in being key team member for a growing early-stage startup

- Passion for driving large-scale decarbonization and a desire to be at the forefront of the global efforts to combat climate change

Compensation and benefits:

- Competitive salary
- Medical and dental insurance
- Flexible hours & paid time off
- Join a collaborative and passionate team
- The opportunity to shape the rapidly growing green hydrogen industry
- Mentorship from experienced technical and business teammates
- The chance to work closely with other leading transportation decarbonization partners

Location

- San Francisco
- Key vendors, suppliers, and partners in the broader Bay Area

About the Verne team

At Verne we value a diversity of approaches to critical thinking. We aim to establish an environment that welcomes different perspectives, where informed discussions flourish and each individual voice is respected. The team thrives in asking questions to gain a more nuanced understanding. We all strive to provide constructive feedback and ultimately aim to make each of us a better listener, thinker, and leader. Lastly, our mission is ambitious and difficult, so we don't forget to have fun!

About Verne

Verne is an Equal Opportunity Employer and does not discriminate on the basis of race, color, creed, gender, religion, marital status, registered domestic partner status, age, national origin, ancestry, physical or mental disability, medical condition, sex, genetic information, sexual orientation, military and veteran status or any other consideration made unlawful by federal, state, or local laws. It also prohibits unlawful discrimination based on the perception that anyone has any of those characteristics, or is associated with a person who has or is perceived as having any of those characteristics.

To apply: Please send resume and cover letter to contact@verneh2.com