
Job Description

Job Vacancy : Lead Research and Development Engineer

Date: 03/09/2022

Location: Madison, Wisconsin (Remote work may be available)

Salary: Highly Competitive Plus Benefits

Hours: Full Time

Contract Type: Permanent

Reporting to: Chief Technology Officer

About Type One Energy

Fusion energy is the clean power at the center of stars. Mastered here on earth, its unique advantages will rapidly disrupt carbon-based fuels to become the primary form of baseload power on the planet.

Type One Energy is a fusion energy startup applying innovations in additive manufacturing, quasi-symmetry, and HTS magnets to commercialize an economical stellarator power plant. The stellarator is an innovative marriage of elegant physics, engineering artistry, and practical utility.

Founded by experts and technology from the University of Wisconsin, Type One Energy is a world leader in stellarator R&D with the mission to provide clean and affordable fusion power to every city across the globe.

In collaboration with our public and private partners, we are uniting the outstanding operation of a stellarator with breakthroughs in theory, additive manufacturing, and high temperature superconducting magnets. We are producing an economical fusion power plant to be deployed worldwide in the shortest amount of time.

About the role

Type One Energy are looking for a Lead Research and Development Engineer to manage the development of the 3D shaped structural components of a fusion stellarator. The role will be responsible for the development of divertor and coil-fixture mechanical structures, including their fully 3D-optimized surface shapes and cooling channel geometries.

In this role, you will use their expertise to develop strategic plans, refine requirements and provide technical management in achieving development objectives. The role will be managing the optimization of complicated 3D shapes to find the optimal design for the stellarator.

Responsibilities

- Manage a team of Engineers to deliver precise engineering projects and structural optimization of stellarator components.
- The Lead R&D Engineer will join the structural optimization R&D team that creates state of the art software for topology optimization.
- Contribute to the development of new methods and algorithms as well as the maintenance and improvement of existing implementations.
- Lead the optimization and design of complicated 3D shapes such as divertors, vacuum vessels, and coils.
- Leads planning, architecture, or research at a project level.

Required Qualifications and Experience

- MS or BS in Engineering, Computer Science, Numerical Optimization or Structural Optimization with strong proven experience years' experience working in highly technical industries.
- PhD with strong working experience is highly favourable.
- Significant commercial experience with software design and development methodologies
- Proven track record of crafting robust and efficient code.
- Excellent technical knowledge and commercial experience with programming, numerical analysis, numerical optimization and structural optimization.
- Experience managing projects and delivering high-quality products in a large-scale software development environment.
- Ability to translate business needs into development plans.

To Apply

Please send your CV and cover letter to Sam Belazka at sam.belazka@typeoneenergy.com and for more information please visit our website at www.typeoneenergy.com.