Malta Inc. – Modeling and Simulation Intern

The Company

Malta Inc. (“Malta”) is accelerating the global transition to a decarbonized grid by developing and deploying breakthrough long-duration, low-cost, grid-scale energy storage solutions. Safe and scalable, Malta's technology represents the state-of-the-art in utility scale renewable energy storage. The company has successfully developed major funding and technical partnerships with world-class partners including Breakthrough Energy Ventures, Alfa Laval, and Concord New Energy.

Malta was launched from Alphabet’s “X” (formerly Google Moonshot Factory) and is now pioneering the development and delivery of long duration (6-24 hours), grid-scale (>100 MW), and low-cost (<$100/kWh) energy storage systems using molten salt. Primary applications enabled by these systems include renewables firming, grid-balancing, transmission & distribution upgrade deferral, and enabling the transition to fully coincident 24/7 renewable energy supply.

Led by an experienced management team, Malta is growing rapidly and is currently developing its first large-scale storage sites. Malta’s investors and partners are some of the largest and most creative tech and industrial companies in the world, and together they are tackling energy decarbonization, one of the most urgent issues facing humanity today. Malta is headquartered in Cambridge, MA and operates globally. For more information, please see www.maltainc.com.

Job Description

The System Integration team at Malta Inc. is seeking a graduate-level or senior undergraduate candidate in qualified degrees for an internship position with a focus on modeling and simulation tasks. The qualified candidate will have the opportunity to work within a dynamic start-up environment to:

- Develop, troubleshoot, and improve the steady-state model of Malta’s energy storage system
- Complete performance model runs and studies to support the Commercial team for global project needs
- Conduct engineering studies, analyze data, and present results to the Engineering team
- Learn about plant design, system integration, and engineering best practices
- Support the System Integration team with engineering design studies, tasks, and data requests from external partners

Requirements

- Academic background in mechanical engineering, power plant engineering, chemical engineering, or a related field
- Strong technical background and knowledge of thermodynamics, systems engineering, and physics-based first principles
- Experience using a data-driven approach to analyze problems and deliver robust, optimized solutions
- Excellent communication skills (oral and written) and a collaborative attitude
- Ability to adapt to changes in a fast-moving environment
Preferred Qualifications

- Experience with EBSILON, Thermoflow, EES, Aspen Plus, or similar modeling software
- Working level understanding of heat and mass balances for equipment and systems
- Working knowledge of source control management tools, such as Git, TortoiseSVN
- Programming experience with Pascal, C++, FORTRAN, Python is plus
- Availability to start by June 2021, or earlier.

Additional Information

- This is a paid position, with standard internship hourly rates.
- This opportunity is expected to be virtual, subject to on-going COVID restrictions.
- The duration of this internship opportunity is flexible and based on on-going needs.

*Malta is an equal opportunity employer. We are committed to providing an inclusive work environment for all employees.*