Altaeros Energies seeks an electrical engineering intern to assist with the design and analysis of the generator and power converter for its breakthrough Airborne Wind Turbine (AWT). The Altaeros AWT uses a helium-filled, inflatable shell adapted from proven aerospace technology to lift a wind turbine up to 600m in the air, harnessing winds over five times as strong as those that a tower can reach. The company recently completed and successfully tested a half scale prototype and is seeking to scale up to a commercial product.

A number of generator and power conversion architectures are being considered for the AWT. The selected equipment must exhibit a good combination of low weight, high performance and high reliability. The power conversion stages also differ from traditional turbines because of the long electrical cable which transmits power to the ground and necessitates a boost stage to increase the transmission voltage. This position will focus on assessing the candidate generator and power electronics designs, and interfacing with potential vendors, to determine the best design for commercial AWTs. The position may also develop a preliminary power offtake design for delivering power to the end user.

The internship will start at the beginning of the summer and will last 10-12 weeks. The position will include both cash and equity compensation. Altaeros is particularly interested in meeting candidates that may wish to remain involved with the company after the internship ends.

Qualifications
- Junior, Senior, Graduate Student, or recent graduate in Electrical Engineering or similar field
- Familiarity with generator and power electronics design
- Ability to work independently to achieve deliverables
- Passionate and fun attitude

Responsibilities/Activities
- Assess candidate generator types for power density, efficiency, cost, reliability and compatibility with power conversion stages
- Assess candidate power conversion architecture for low weight, efficiency, cost and compatibility with generator
- Determine optimal generator and power electronics architecture
- Possibly investigate power offtake options for end user
- Opportunity to take on short-term projects in other areas to learn about management of a startup company

About Altaeros Energies, Inc.
Altaeros Energies is an early-stage company working to bring the first airborne wind turbine to market. Altaeros turbines hold the potential to deliver cheap renewable energy to rural, island, and offshore sites that face high electricity costs. Founded in 2010 by MIT & Harvard alumni with a background in aerospace, energy, and industrial gases, Altaeros has received seed funding from private investors, the U.S. Department of Agriculture, the California Energy Commission, and the Maine Technology Institute. Altaeros Energies is located in the Greentown Labs incubator in Boston, MA.

If interested, please email your CV and a one paragraph statement of interest to Adam Rein at jobs@altaerosenergies.com.