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## Electrical Systems Team Lead

### Description

Windlift's mission is to produce energy for a sustainable civilization, which we believe is the defining challenge of our time. Our approach harnesses wind energy using 90% less material than traditional turbines and will cut the cost of wind energy in half. We have successfully demonstrated the core technology and are expanding our team to:

- Produce a fully functioning tech demonstrator
- Develop a production-ready design for our early-adopter government customers
- Design, build, and test a commercial offshore system

If you are passionate about our mission and want to join a team developing technology with the potential to produce scalable, low-cost sustainable energy, we'd like to talk with you.

We're hiring an electrical systems team lead. The electrical team will be challenged to create state of the art electrical topologies that integrate very power dense brushless DC motors and drives, bi-directional DC-DC converters, an electromechanical tether, battery systems, wiring and connectors, a complex low voltage control system, and more to power Windlift's airborne power generators and ancillary systems. You:

- Have a MSEE or higher with 15+ years of experience
- Are comfortable managing the development of the complete electrical system on multiple development programs in parallel
- Have experience managing external vendors in the development of complex electrical systems, for example motor/drives and DC-DC converters
- Have experience with building high performing teams as you are empowered to build out your team, currently envisioned as 2-3 engineers and growing in future years
- Are hands-on, able to design, build, and troubleshoot in a fast-paced environment
- Are comfortable designing and safely working with voltages up to 800V
- Love to work on difficult problems, build cool things, experiment at the edge of what is possible, learn new skills, and share your experience with the team
- Look forward to working with a diverse team of engineers, builders, dreamers, and doers

The ideal candidate will also:

- Have experience with embedded controllers and systems (i.e., flight controllers, other microcontrollers)
- Have thermal analysis experience
- Be comfortable designing and working with voltages in the 4-10 kV range on

### Employment Type

Full-time

### Job Location

Durham, NC, USA

### Date posted

August 3, 2023

### Base Salary

\$ 150000 - \$ ?

future product

- Have experience with designing functional circuit boards
- Understand basic operational principles and design of brushless DC motors
- Have a solid controls background, especially as applied to brushless DC motors and DC/DC converters
  
- Have experience with communication protocols such as UAVCAN, CANopen, and RS 485
- Intelligently guide Windlift in the use of silicon IGBT vs. SiC/GaN switches, critically evaluating the correct technology and when to apply each within the evolution of the product and the company
- Bring industry experience to the table when considering safety, testing protocols, realistic timelines, etc.

This is an incredible opportunity to join Windlift at an inflection point in growth and make a real contribution to our mission of producing energy for a sustainable civilization.

We cultivate a culture of inclusion for all employees that respects their individual strengths, views, and experiences. We believe that our differences enable us to drive innovation, make better decisions, and accomplish extraordinary things.

Medical, dental and vision benefits are provided. Windlift is located close to Raleigh, Durham, Cary, and Research Triangle Park, NC, all of which are great places to work, live, and play.