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## Launch/Land Systems Mechanical Engineer

### Description

Windlift's mission is to reimagine the energy systems which power a thriving human civilization. Our technology harnesses wind energy using 90% less material than traditional turbines, dramatically increasing the flexibility of deployment and reducing costs.

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 a Launch/Land Systems **Mechanical Design Engineer**. This position will be part of a team of engineers with an immediate focus on designing the mechanical ground system that will enable autonomous launch and landing of the power-generating aircraft.

This role will be responsible for:

- Creating CAD models of the systems we are developing including 2D drawings and BOMs.
- Supporting other teams with the ability to quickly change tasks as needed in a highly dynamic environment where priorities often shift.
- Working independently, owning their assigned tasks.
- Ensuring all designs meet requirements for both the subsystem and overall system.
- Fabricating proof of concept and testing mechanisms.

This role requires:

- BS/MS Mechanical or equivalent engineering degree
- Experience developing solid models of parts and assemblies using CAD, preferably using SolidWorks or equivalent solid/surface modeling software.
- Ability to make decisions about a design by optimizing the whole system rather than components.
- Understanding of manufacturing processes such as machining, rapid prototyping, extrusion, casting, welding, etc.
- A love for working on difficult problems, building cool things, experimenting at the edge of what is possible, learning new skills, and sharing your experience with the team.
- Excitement and enthusiasm for working with a diverse team of engineers, builders, dreamers, and doers in a positive environment.

### Employment Type

Full-time

### Job Location

2445 S Alston Ave, 27713, Durham, NC, USA

### Date posted

April 12, 2024

### Base Salary

\$ 75000 - \$ commensurate with experience

Other desirable experience:

- 2+ years of experience (preferably industry/non-academic experience) in machine design and structural analysis.
- Demonstrated experience modeling and analyzing structures using finite element analysis tools such as SolidWorks Simulation / Ansys as well as applying hand calculations/handbook methods where appropriate.
- Experience designing electromechanical systems, including mechanically fastened joints, gearing, bearings, power transmission elements, slip ring integration, integration of motion control sensors, motors, and drives.
- Practical experience in evaluating life-cycle, fatigue and failure modes and effects analysis of machine components which experience cyclic loading as well as relative motion between components/subassemblies.
- A working knowledge of motion control in machine design, including appropriate selection and integration of bearings, gear systems, position and rate sensors, rotary and linear actuation, spring/damper integration and motor control.
- Experience with design in marine environments, including materials selection, corrosion resistance, sealing systems, anchoring and mooring, and general ocean engineering.
- Experience with requirements development within a Department of Defense context.
- Experience with fabrication tools (hand tools, mill, lathe, welding, saws, ect.)

This is an incredible opportunity to join Windlift at an inflection point in growth and make a real contribution to our mission.

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.