



<https://windlift.com/careers/avionics-engineer/>

Avionics Engineer

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

We're hiring multiple **Avionics Engineers** at different education and experience levels. As an avionics engineer you will have responsibility for selecting and implementing sensors and microcontrollers and implementing all communication for both the aircraft and ancillary systems. You:

- Have a BS in an engineering field, and 2+ years of experience working with avionics systems,
- Have experience with embedded systems or flight controllers,
- Can evaluate and implement communication protocols such as UAVCAN, CANOpen, and RS 485 appropriate to support robustness to noise, physical spacing and proximity to other components, wire routing, etc.
- Have a strong background in selection and integration for sensors (such as RTK GPS, IMU, magnetometers, or LiDAR) and actuators (servos, motor controllers),
- Can work independently to design, implement, and debug avionics subsystems, including noise issues,
- Are comfortable working on multiple projects in parallel,
- Can read, modify, and debug software (C++ & MATLAB),
- 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, and
- Look forward to working with a diverse team of engineers, builders, dreamers, and doers.

The ideal candidate will also have experience with some of the following:

- Ardupilot software, MAVLink protocol,
- Designing carrier boards for microcontrollers,
- Kalman filtering / sensor fusion,
- Communicating with a BMS or microgrid components, such as with MIL-STD-3071,
- Evaluating systems to MIL-STD 810,
- Implementing controllers on embedded systems,
- Modelling and simulating dynamic systems,
- Flight mechanics and aerodynamics,

Employment Type

Full-time

Job Location

Durham, NC

Date posted

August 4, 2023

Base Salary

\$ 85000 - \$?

- Designing redundant systems,
- Source code management tools, and
- RC flight such as piloting, operating drones, writing preflight checklists, 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.