

Power Systems Engineer

Description:

VerdeGo is seeking an electrical engineering graduate with industry experience in electrical and electronic systems as applied to hybrid-electric power generation and related systems for aviation. The successful candidate will demonstrate experience with operational hardware on projects in aviation, automotive, or other industries characterized by high quality standards, focus on efficiency, and innovative technology. VerdeGo systems feature complex low voltage wiring of control boxes, contactors, sensors, actuators, and power systems. They also feature High voltage DC components, so experience with HV DC systems is beneficial. Finally, all systems include avionics communication that might include CAD, RS232 or similar.

The successful candidate should have experience with wiring diagram design, layout, execution, and testing. They should have strong skills in electronic system design, component selection and application, integration, and testing. Experience with sensors and measuring equipment, data acquisition, processing, and analysis along with substantial troubleshooting of complex systems is required. Experience with electrical system modeling and simulation using tools such as Matlab and Simulink is preferred. Finally, proficiency at PC board layout and design is important.

Job Responsibilities

- Design, develop, test, and validate Electrical and Electronics systems including Power systems with a focus on optimizing for efficiency and weight
- Communications systems at VerdeGo Aero will include CANbus, RS-232, RS-422 and other protocols. Successful candidate must demonstrate clear understanding of application of these protocols, including physical execution such as proper grounding and shielding, programming, and system troubleshooting
- Create drawings, work with existing drawings, and suggest improvements to drawing documentation for outside manufacture of custom LV and HV wiring and control hardware.
- Engineer functional systems including the development of customized components as well as the selection of off-the-shelf components
- Select appropriate sensors and other test equipment, perform hands-on testing to validate system performance
- Some familiarity with Li-Ion battery pack layout, connection, and cooling is a bonus. Familiarity with options for design and implementation of battery management systems is helpful.
- Job role may include creation of operating manuals, service manuals, installation requirements, and other written documentation as may be required for FAA certification and customer satisfaction over entire product lifetime.

Requirements/Qualifications:

- Bachelor's degree in electrical engineering, aerospace engineering, or related major
- 5+ years of experience in the aerospace industry
- Excellent technical abilities
- Strong communication skills
- Project management experience