



Sr. Embedded Electrical Engineer - Job Description

The Sr. Embedded Electrical Engineer (EE) is responsible for developing, production and testing of unmanned aerial systems and associated systems and subsystems. The EE will manage electrical requirements, develop architectures, strategies, and perform sizing/capacity of the system/subsystems. The ideal candidate will have experience in unmanned aerial systems, robotics and/or military electronics. The EE will collaborate with a multifunctional team - management, customers, suppliers, and specialty engineers to ensure functional integration and requirements compliance through electrical system design, development, and sustainment. Supporting analysis, testing, troubleshooting, validation, data collection and engineering tasks are expected to be conducted by the applicant.

Specific Duties

- Design and build electrical interfaces between avionics components.
- Develop and execute Trade Studies and Analysis supporting cost, performance, and weight studies for alternative design concepts.
- Collect and analyze system requirements, write test plans and execute tests to establish conformance to requirements, respond to customer requests to assess system operational functionality
- Troubleshoot existing hardware and develop/test solutions
- Communicate ground and flight test results via written reports. Input findings into the Discrepancy Report. Report results.
- Coordinate design development and system integration (including subcontractors)
- Support System Requirements Reviews (SRR) and Design Reviews (PDR/CDR)
- Support the preparation and execution of Engineering Releases, Interface Control Documents and Specifications
- Mentor Engineers on Electrical Engineering Processes, Procedures, tools, and techniques
- Assist Program Managers / Project Engineers in preparing Integrated Master Schedules, Test plans ensuring budget allocation per the RAM
- Manage your own workload and deliver solutions in a fast-paced environment
- Support the Chief Engineer's written tasking as requested
- Support the development and submittal of compliant technical proposals
- Support other engineering tasks, as required.

Qualifications

- BS degree in Electrical Engineering from an accredited college or university and 7+ years of experience in aerospace, robotics, unmanned aerial vehicles, automotive electrical systems, medical device, or similar industry. Less experience will be considered with advanced degrees.
- Proficient in component selection, schematic design, and PCB layout.
- Proficient in Altium Designer, Autodesk EAGLE, or similar.
- DC-DC high voltage power conversion in unmanned systems preferred



- Knowledge of analog sensors, digital sensors, circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming
- Experience in system design (design for manufacturability), validation and testing.
- Experience with avionics equipment preferred
- Proficient with serial communications physical and data-link layers. Specifically, CAN and associated tools (UAV CANbus), RS-485, RS-422, RS-232, Ethernet, RC PWM (pulse-width modulation).
- Familiar with low-level device drivers in C. Note that we have other team members performing the coding, but this position would work closely with that team member
- Familiar with Plot Juggler or similar data analysis and visualization tools (helpful, not required)
- Knowledge of military aerospace standards preferred
- Strong communication skills including verbalization of technical concepts / topics
- Proficient with Microsoft Office (Outlook, Excel, PowerPoint, Word).
- US Citizenship Required

Company Description

Dragonfly Pictures, Inc. (DPI), founded in 1992, is growing! We are a small R&D business transitioning into production. We have specialized in the design, fabrication and flight test of unmanned air vehicles and associated technologies. DPI leverages its unique skills and experience to develop ground-breaking technologies from concept through design, fabrication, qualification, and flight test. The company is dedicated to production of quality unmanned systems for the Dept. of Defense and commercial markets.

Address

Dragonfly Pictures, Inc.
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Industry

Aerospace and Defense, Manufacturing

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