



Nanoracks

Senior Avionics Engineer

Position: Senior Avionics Engineer

Reports to: Avionics Manager

Location: Webster, Texas (We're right by Johnson Space Center!)

About Nanoracks:

Nanoracks is an entrepreneurial aerospace company focusing on providing commercial access to space, currently on the International Space Station (ISS), suborbital vehicles, India's Polar Satellite Launch Vehicle, and more! The company, which was once tagged as the "UPS of Space", has sent nearly 1,000 payloads to the Space Station. Nanoracks kickstarted the CubeSat deployment revolution and has deployed over 250 to date.

Since 2009, Nanoracks has created and expanded new in-space markets and has been the world leader for ushering in a new era of in-space services. Currently, Nanoracks is working to build commercial space stations ("Outposts") from the spent upper stages of launch vehicles in orbit. This technology will enable spent upper stages to be used as crewed and un-crewed space stations for various purposes and customers—both civil and commercial.

Nanoracks will provide and facilitate an ecosystem of interoperable technologies and distributed free flying space stations. The commercial approach to this effort is described in NanoRacks' LEO Commercialization Study, available online here: <http://nanoracks.com/nanoracks-leocom-study-release/>.

Nanoracks prides itself on being the first commercial space station company with customers – customers that come from 30+ nations around the world.

Description:

Nanoracks is looking for a self-starter to work with a talented and dynamic technical team on the design, test, integration, deployment, and operation of spaceflight avionics and electrical hardware systems. The qualified candidate will play a vital role in the success of advanced avionics hardware on programs such as the Nanoracks Bishop commercial airlock, internal ISS rack payloads and NanoLabs, external ISS payloads and platforms, satellite deployers, Nanoracks Outpost, and other revolutionary aerospace systems.

Key Duties and Responsibilities:

- Design and develop space qualified electronics, including power supplies and power distribution systems, command and data handling systems, electromagnetic filters, sensors, integrated flight computers, electrical cables and harnesses, and other digital and analog circuits.
- Use digital multi-meters, oscilloscopes, waveform/function generators, spectrum analyzers, logic analyzers, simulators, power switches, electronic load banks, break-out-boxes, and associated test and measurement equipment to conduct avionics and electrical development and troubleshooting.
- Conduct PCB design, including schematic drawing, layout and routing, symbol and footprint creation, and generation of fabrication files and assembly drawings.
- Write technical documents such as assembly instructions, test procedures, interface requirements, and test and analysis reports.
- Perform qualification and acceptance testing on batteries, capacitors, containment vessels, and other safety critical flight hardware.
- Review payload designs and provide feedback to payload developers to ensure compatibility and compliance with Nanoracks and NASA requirements.
- Support proposal efforts, provide solutions for proposal challenges, communicate and document technical approaches, and provide inputs to cost and schedule estimates.
- Provide regular status reports and updates to Engineering management and Program/Project managers.
- Maintain inventory and traceability controls for avionics components, sub-components, systems, lab tools, test equipment, and electrical systems.
- Prioritize workload to insure timely development, test and delivery of flight and non-flight (ground system) hardware.
- Collaborate with other engineering disciplines, Quality Assurance, Flight Operations, Systems Verifications, and Safety throughout the development, manufacturing, inspection, testing, and qualification process for hardware.

Job Qualifications:

- Bachelor of Science degree in electrical engineering or related technical field.
- Master of Science degree in engineering or science discipline (preferred, not required).
- 10+ years of applicable experience in space flight hardware development and testing.
- Experience in environmental testing of spaceflight hardware, including EMI/EMC, Vibration, Acoustics, Thermal, Vacuum, and other related testing.
- Experience developing embedded systems.

- Experience in fabrication, manufacturing, and assembly of spaceflight hardware.
- Working knowledge of CAN Bus, USB, DIO, RS-232/422, Ethernet, MIL-1553, and other communication interfaces and protocols.
- PCB design, fabrication, and assembly experience (experience with Altium Designer preferred).
- Proficiency with Microsoft Office.
- US Citizenship required.

To apply, please send a cover letter and resume to jobs@nanoracks.com.