



Senior Electrical Engineer (Spacecraft Systems)

Umbra Lab, Inc. is a technology company in Santa Barbara, California. Umbra operates in a dynamic, fast-paced environment and is offering competitive industry salaries with equity options for driven individuals. Umbra is looking for a talented, mission-driven professional to work closely with a multidisciplinary engineering team as a Senior Electrical Engineer, developing flight electronics for next-generation space radar systems. The individual filling this position will collaborate with the electrical engineering team to develop, analyze, manufacture, and test electrical subsystems.

Key Responsibilities

- Collaborate with engineering team to support full life cycle of flight electronics design, analysis, manufacture and test.
- Interface with vendors as the technical representative and subcontracts manager.
- Perform electrical design, including schematic, parts selection and layout, for spacecraft electronics subsystems (e.g. Power Distribution Units, solar arrays, batteries and harnessing).
- Develop and deploy firmware to electronics subsystems.
- Develop and deploy serial protocols and integrate serial transceivers into electronics subsystems.
- Manage full electronics lifecycle including procurement, assembly and test.

Basic Qualifications

- Bachelor of Science in relevant STEM discipline such as electrical engineering.
- 5+ years relevant experience developing high reliability electronics or embedded systems.
- Extensive experience in designing and testing of analog and digital electronics.
- Practical experience with PCB assembly (i.e. subcontracted pick-and-place).
- Familiarity with test equipment such as oscilloscopes, logic analyzers, thermal chambers, and current probes.
- Familiarity with serial interfaces such as SPI, RS-422 and RS-485.
- Comfortable working in a dynamic and fast-paced development environment.

Desired Qualifications

- Masters Degree in relevant technical discipline.
- Experience developing in C / C++ and Python.
- Experience developing firmware for embedded systems (e.g. microcontrollers, FPGAs)
- Experience developing spacecraft power systems.

Additional Requirements

To conform to U.S. Government space technology export regulations, the applicant must be a U.S. citizen, a lawful permanent resident of the U.S., protected individual as defined by 8 U.S.C. 1324b(a)(3), or eligible to obtain the required authorizations from the U.S. Department of State. Learn more about ITAR here: https://www.pmdtc.state.gov/?id=ddtc_kb_article_page&sys_id=24d528fddbf930044f9ff621f961987.

Benefits

- Professional Work Environment
- Flexible Vacation / Paid Time Off Policy
- Medical, Dental and Vision

About Umbra Lab, Inc.

Umbra Lab, Inc. is a venture-backed space company developing next-generation space systems. We are looking for mission-driven professionals to join Umbra Lab. We are building a bold, experienced team of payload developers and spacecraft systems engineers to aggressively expand the state-of-the-art for commercial remote sensing. Join our team to embark on an exciting, innovative and meaningful career. Every team member will have a significant and essential impact, and career growth is unlimited. The industry is just beginning meteoric growth – this is a chance to change how humans and machines use data.