



## Flight Software 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 Flight Software Engineer, developing flight software and firmware for next-generation space radar systems. This position involves integration of auto-coded GNC software with customized mission software services in a Linux environment.

### Key Responsibilities

- Collaborate with engineering team to develop flight software in support of a small satellite constellation.
- Develop, test, and deploy mission software services to interface with satellite GNC communications and payload hardware.
- Working with System Engineers, develop on-orbit CONOPS for spacecraft and payload modes of operation.
- Interface with vendors as the technical representative and subcontracts manager.
- Test and troubleshoot existing software features.
- Compile, test, and deploy software executables to FlatSat and spacecraft hardware.
- Prepare engineering documentation, reports, and test plans.

### Basic Qualifications

- Bachelor of Science in relevant discipline such as computer science or electrical engineering.
- Experience developing and deploying flight software in the C / C++ language.
- Professional knowledge of GNC hardware, orbital mechanics, and the space environment.
- Professional knowledge of attitude and orbit control methodologies.
- Comfortable working in a dynamic and fast-paced development environment.

### Desired Qualifications

- Advanced degree in Astronautical Engineering or relevant technical discipline.
- Experience developing and employing serial bus communications and protocols (i.e., RS-422).
- Familiarity with the Linux operating system.

### 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](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.*