

## Job Description

**Role:** Software Engineer (Command and Data Handling & Compute Operations ) **Location:** Remote initially, transitioning to Ahmedabad within 6 months. **Type:** Full-Time

### About Orbit Grid

As global data processing demands outpace terrestrial land, power, and environmental constraints, Orbit Grid is pioneering the next tier of digital infrastructure: multi-tenant, shared orbital datacenters. We are building the foundational hardware and software stacks that allow high-performance, server-class compute infrastructure to be deployed, shared, and scaled directly in space.

### The Engineering Challenge

We work at the intersection of aerospace, high-density compute, and systems engineering to build spaceborne hosting capabilities. Managing a shared, multi-tenant compute environment in space introduces severe software challenges—from running reliable virtualization on bare metal to bypassing downlink bottlenecks.

You will build the flight software, avionics drivers, and orchestration layers necessary to securely host workloads, monitor spacecraft health, and compress complex insights for transmission.

### What You Will Do

- **Command and Data Handling Software:** Develop and maintain reliable bare-metal and RTOS-based flight software in C/C++ to control spacecraft operations.
- **Compute Orchestration:** Write custom abstraction layers and drivers to securely interface with high-performance compute silicon.
- **Semantic Downlink Architecture:** Design the telemetry and data pipelines that prioritize, compress, and downlink processed insights efficiently.
- **Hardware-in-the-Loop:** Collaborate with hardware teams to test software deployments on physical hardware simulators prior to launch.

### Qualifications

- **Base Qualifications:** 1–2 years of experience in embedded systems software development. Expert proficiency in C/C++ and Python. Strong understanding of RTOS concepts (e.g., FreeRTOS) and microcontrollers.
- **Advanced Qualifications:** 4+ years of experience developing mission-critical embedded software (aerospace, autonomous vehicles, or Linux kernel/driver

development). Experience with high-speed Linux kernel optimization, secure virtualization, or network stack development.

### **Compensation and Benefits**

- Initial monthly stipend during the remote onboarding period.
- Substantial founding-team equity package with standard vesting terms.
- Full-time salary matching local deep-tech standards upon relocation to Ahmedabad.
- Relocation assistance to Ahmedabad within the 6-month window.

**To Apply:** Send your CV, a portfolio demonstrating structural analysis/mechanism design, and a brief write-up to [contact@orbitgrid.in](mailto:contact@orbitgrid.in)