

Astrogate Labs is a space-technology start-up based in Bengaluru, building core technologies in laser communication terminals and networks for small-satellites. Astrogate Labs aims to simplify, reduce cost of communication, and enable satellites send more data to ground. We have developed one of the industry's smallest optical communication terminals targeted for small satellite use, further scaling our products and aiming for our first satellite mission. We aim to revolutionize satellite communications and support the growing satellite downlink needs with a network of optical ground stations and in-space relays using the technologies developed in-house.

Why Join Astrogate Labs?

- **Work on cutting-edge technology:** Build laser communication systems that are 100x faster than traditional RF, deployed on satellites and defense platforms and the only scalable solution for building inter-planetary internet
- **Real impact:** Your work will directly contribute to India's space capabilities and national security applications
- **Ownership:** In a lean & agile team, you'll have significant responsibility and visibility across the entire product lifecycle
- **Learning:** Work alongside experienced aerospace engineers and advisors
- **Growth:** Be part of a rapidly scaling startup backed by marquee investors, with clear pathways to leadership roles

Our Culture

We're a startup, which means hustle is part of the DNA. Expect fast iterations and the need to be resourceful.

We value:

- Technical excellence with a bias for action
- Collaborative problem-solving across disciplines
- Curiosity and continuous learning
- Pragmatism balanced with innovation

Job Title: Systems Engineer

Duration: Full-time

Location: Sahakarnagar, Bengaluru

Qualification: BE/BTech or Masters in Aerospace, Electronics, Electrical, or related engineering discipline, 2+ years of experience in systems engineering for hardware products (aerospace, defense, robotics, or similar complex systems preferred)

Job Responsibilities

- **System Architecture & Integration:** Define system requirements, interface specifications, and integration strategies for laser communication terminals across terrestrial, airborne, and space applications
- **Requirements Management:** Translate product functional, performance & certification, needs into detailed technical requirements, maintaining traceability across subsystems (optics, electronics, mechanical, software)
- **Subsystem Coordination:** Work closely with optical design, avionics, structural, and software teams to ensure cohesive system development. Manage & monitor technical tasks and risks across programs and diverse teams
- **Testing & Validation:** Design and execute system-level test campaigns including thermal vacuum testing, vibration testing, field trials, and performance characterization
- **Performance Analysis:** Analyse link budgets, evaluate system performance under various environmental conditions, and troubleshoot complex multi-subsystem issues
- **Documentation:** Create comprehensive system documentation including interface control documents (ICDs), develop & enforce system integration & test procedures, and qualification reports
- **Client/Partner Interaction:** Support technical discussions with partners and clients. Technical marketing support for proposals, bids, white papers etc.

Required Skills/Experience

- Strong fundamentals in at least two domains: optics, mechanical design, digital design, embedded systems and software and/or control systems
- Experience with full product development lifecycle from requirements to V&V and operation
- Understanding of interface design between hardware and software subsystems
- Ability to read and interpret technical drawings, schematics, layouts & technical manuals and interface control documents
- Experience writing detailed technical documentation and delivering crisp presentations
- Hands-on mindset—comfortable in the lab, not just behind a desk
- Excellent problem-solving skills and ability to work under pressure

Desired Skills/Experience

- Experience with satellite systems, payloads, or spacecraft subsystems
- Familiarity with free-space optical communications or RF communications
- Knowledge of space systems engineering, space program management and space qualification standards (thermal-vac, vibration, EMI/EMC testing)
- Exposure to embedded systems and communication protocols
- Experience working in startup or fast-paced R&D environments

Other Requirements

- Motivated to work within a multidisciplinary team in a fast-paced environment
- Self-driven desire to learn more & continuously upskill themselves
- Ability to deal with challenges, and work out solutions in a team setting
- Relentless pursuit of excellence in all aspects of work
- Strong interpersonal and organization skills to enable working in a dynamic team
- Strong verbal and written communication skills

Benefits

- Health Insurance coverage
- Flexible working hours
- Opportunity to publish research on behalf of Astrogate Labs in national and international conferences

If you like working in a fast-paced environment with a talented multi-disciplinary team on developing and maturing state-of-the-art LaserComm systems, then this role might be for you.

Please send your resumes to career@astrogatelabs.com.

Astrogate Labs is an equal opportunity employer. We celebrate diversity and are committed to creating an inclusive environment for all employees.