

Senior Structural Engineer

Simera Sense has an exciting opportunity for a Senior Structural Engineer to join our dynamic team. The company is fast becoming a leading mid to high-resolution earth observation camera supplier for CubeSats and small satellites. Our optical payload products aim to offer complete space imaging solutions for small satellites with plans to expand. We are a fast-growing, dynamic team of enthusiastic engineers that supplies space and satellite companies from around the globe. Our company is based in Somerset West, close to all amenities and diverse natural beauty, providing great lifestyle options. To apply for this position, go to our website:

<https://simera-sense.com/jobs/>

Job Type: Full Time

Report To: Lead Structural Engineer

Position Type: Full Time

Remote Opportunity: No

Location: Somerset West, Western Cape, South Africa

Job Description: The candidate will be tasked with the structural design, analysis and testing of electro-optical imaging systems for use in spaceborne applications such as CubeSats. The successful candidate will join the structural analysis team and, therefore, be responsible for maturing and maintaining the structural analysis and testing procedures within the company. The position requires the ability to merge numerous multi-physics design requirements into a single instrument and subsequently collaborate with optical and optomechanical engineers. Previous experience designing and analysing complex mechanical structures is a must, with high attention to detail and a passion for success. The successful candidate can expect to be immersed in a fast-paced and challenging technical environment which offers the opportunity to push the boundaries of what is achievable with optical payloads in the CubeSat domain.

Key Performance Areas and Responsibilities:

- Generating design requirements and performing the detailed design of high precision optomechanical systems for spaceborne applications.
- Performing detailed structural analyses of optomechanical systems (for spaceborne applications) utilising software tools for finite element analysis and structural-optical interaction.
- Act as senior Structural Engineer, maturing and improving the company's structural analysis procedures.
- Manage and perform the qualification testing of newly developed systems.
- Generating and maintaining technical documentation such as design documents, test procedures, test reports, etc.
- Provided technical support to clients for all structural-related queries.

Note: Due to the nature and variety of Simera Sense's projects, additional responsibilities can be added occasionally.

Required Skills:

- 5+ years engineering experience, preferably in the space domain.
- Highly experienced in mechanical design and conducting finite element analysis (previous experience using NX Nastran is advantageous, but not a requirement).
- Advanced technical knowledge of static and dynamic analyses and a thorough understanding of engineering principles and best practices.
- Experienced in guiding space structures through the development phases from requirements generation through to manufacturing, qualification and testing as per the applicable standards (ECSS and GEVS).
- Previous experience in finite element model correlation and results verification through testing (vibration, modal, shock).
- Highly proficient in verbal and written communication.
- Very high attention to detail with the ability to execute tasks accurately and in a timely fashion.
- Willingness to share expertise and train other employees.
- Proactive approach to taking ownership of the relevant technical domain within the company.
- Experience and knowledge of optical/optomechanical systems is advantageous.
- Experience with Siemens Teamcenter and NX software is advantageous.

Minimum Required Education:

- Bachelor's Degree in Mechanical Engineering, Optomechanical Engineering or related

What we offer:

- The opportunity to work in the fast-growing space industry.
- Niche global market for optical payloads for microsatellites.
- Cutting-edge technology at your fingertips.
- A competitive salary.
- A friendly working environment.