SIMERA SENSE

Mechanical Design Engineer (Optomechanical Engineer)

Simera Sense has an exciting opportunity for a Mechanical Design Engineer/Optomechanical Engineer to join our dynamic team. Our 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 Optomechanical Engineer
Position Type: Full Time
Remote Opportunity: No
Location: Somerset West, Western Cape, South Africa
Job Description: The candidate will work under the supervision of the Lead Optomechanical Engineer and will be tasked to assist with the design and integration of electro-optical imaging systems for use in space-borne applications such as CubeSats. The successful candidate will need the ability to merge numerous and multi-physics design requirements into a single instrument and subsequently collaborate with mechanical and electronic engineers. Previous experience designing optomechanical systems or precision mechanics is beneficial; however, having very high attention to detail and a passion for success is a must. The successful candidate can expect to be immersed in a fast-paced, team-based, and challenging technical environment which offers the opportunity to push the boundaries of what is achievable with optical payloads in the CubeSat domain. This position will require a substantial amount of on-the-job training.

Key Performance Areas and Responsibilities:
- Assist with the detailed design of high-precision optomechanical systems
- Performing the 3D CAD of optomechanical systems, mechanical components and optical elements
- Creating detailed, high-tolerance optomechanical drawings
- Selecting and procuring COTS/custom materials and components as required by the design
- Managing the manufacturing of various mechanical components
- Designing the assembly and integration processes for the designed optomechanical systems
- Generating technical design documentation, integration documentation, assembly instructions, BOM's for newly developed systems before handing it over to the production team
- Performing the assembly, integration and testing of designed optomechanical systems to qualify newly developed systems
- Providing technical assistance to the production team as required
- Completing general tasks related to mechanical engineering as required

Required Skills

- Experienced in designing optics and optomechanics, or as a minimum in designing precision mechanics.
- Have a strong mechanical aptitude
- Experience guiding a conceptual design through the development phases from requirements generation through to production, qualification and testing
- Experience working with 3D CAD software. (Knowledge of Siemens Teamcenter and NX software is advantageous)
- Highly proficient in generating technical documentation
- Basic understanding of finite element analysis and be able to interpret results for design improvement
- Very high attention to detail with the ability to execute tasks accurately and in a timely fashion
- The successful candidate must have the ability to work independently, as well as within a multidisciplinary team and must be eager to learn
- Knowledge and experience working in a cleanroom environment is advantageous

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 with free coffee and regular company braai's.