

POSITION ANNOUNCEMENT

Job Title: Product Development Engineer
Job Type: Full-time
Location: Boulder, CO, USA

Position Summary

Double Helix Optics, a growing innovator in 3D imaging technologies, is seeking a product development engineer to join our dynamic team expanding the boundaries of 3D imaging and ranging technology.

Double Helix Optics utilizes computational optical imaging approaches for acquiring and rendering high resolution 3D images at microscopic and macroscopic scales. Double Helix Optics solutions are made accessible to a variety of customer profiles through the development of their SPINDLE family of products. The candidate filling this position will join a team responsible for the design, development, and testing of optical hardware to enhance the functionality of the company's 3D imaging products. The ideal candidate will have a good working knowledge of optical system experimentation including assembly and alignment of optical components/subsystems, optimization of imaging parameters, and data analysis. Candidate must have a proven industry track record of taking projects from concept, through prototype, to product. Applicants considered for this role must have industry experience in optical system design.

Ideal candidates are self-motivated, self-directed, and able to function within a small, fast-paced development team. The position will be located in Boulder, CO, USA.

Primary Responsibilities

- Work with the engineering team to develop product design requirements, recommend design architectures, determine design feasibility, and evaluate design alternatives.
- Perform analysis, simulations, and experiments to verify product designs meet through the entire product development lifecycle.
- Build prototypes, perform engineering analyses, risk assessments and product testing.
- Create drawings, reports, and other documentation to support development and manufacturing activities.
- Contribute to system-level project discussions, planning, and design reviews.

Technical Qualifications

- Well versed in a broad range of optics concepts including geometrical optics, physical optics, illumination, and opto-mechanical alignment. Experience in microscopy instrumentation is a plus.
- Experience in modeling optical systems, performing system optimization, and tolerance and performance analysis. Experience with ZEMAX, or equivalent, is a plus.
- Strong hands-on experience in setting up high precision optical imaging systems.
- High level of proficiency in SolidWorks, or other CAD software, required.

Key Qualifications

- Minimum 3 years of industry experience as an engineer in optical systems development required.
- Strong candidates will demonstrate a track record of successful product development experience.
- A self-motivated team player with excellent oral and written communication skills.
- Exceptional technical problem-solving skills.
- Quick learner, able and interested in acquiring new skills and competences.