



WEBCO HR, Inc.

Let Experience be Your Guide

OPTICAL SYSTEMS ARCHITECT – SANTA CLARA, CALIFORNIA

WEBCO HR, Inc. is seeking an Optical Systems Architect for one of our clients located in Santa Clara, California.

SUMMARY:

Our client is seeking an Optical Systems Architect to join the SIS R&D team. You will be responsible for architecture definition and design of state-of-the-art optical interferometers for picometer-scale displacement metrology applications.

RESPONSIBILITIES:

- Own product definition of next-generation optical interferometers.
- Actively participate in early-phase customer interactions with Marketing.
- Provide technical strategy and guidance to Marketing and Applications Engineering to successfully achieve customer design wins.
- Perform an end-to-end optical simulation at the system level using FRED, Zemax, Matlab, and ray-trace modeling tools.
- Understand displacement metrology trends for lithography, electronics die packaging, and calibration markets and propose market opportunities.
- Join and influence Industry Standards and MSA bodies (e.g. SPIE, ASPE, etc.).

REQUIREMENTS:

- A Master's degree in Optical Physics or an Optics related Engineering discipline and 8+ years relevant experience OR a PhD in a directly related field with 5+ years of experience.
- Extensive knowledge of high-precision optical systems design, analysis, fabrication, and applications.
- Experienced and knowledgeable in laser physics and gaussian beam propagation.
- Good understanding of integrated optical systems involving the integration of light sources, fiber optics, imaging optics, precision mechanics, image processing, and other key sub-systems and technologies.
- Understanding of precision alignment & metrology techniques.
- Understanding of mitigation techniques for different types of optical system impairments.
- Writing technical reports in both detailed written format and concise pictorial oral presentation format.
- Working knowledge of optical test and evaluation equipment.
- Direct experience in the specification and testing of optical systems.
- Experience with one or more optical design software packages such as Zemax.
- Attention to detail. Demonstrate persistence in identifying the cause of unusual results – good problem solver.

- Ability to work independently toward project goals with general guidance.
- Supports company values including ethical conduct and high integrity in all actions.
- Complies with health and safety policies and procedures.
- Reliability analysis of optical components.
- Understanding of degradation mechanisms and acceleration factors.
- Designing, setting up, and conducting optical system lifetime tests.
- Analyzing test data and conducting statistical analysis.
- Ability to layout mechanical arrangements for optical testing, possibly in CAD.
- Experience in the specification or design of motion control systems, such as fast-focus modules.
- General knowledge of operations, including procurement, planning, manufacturing, test engineering, and quality systems.
- Execution of assigned tasks in a time and cost-efficient manner.
- Excellent verbal and written communication skills.

COMPENSATION:

- Base Salary
- Full Benefits

COMPANY:

Our client is the world's leading electronic measurement company, helping scientists and engineers address their toughest technical challenges with confidence through innovations in wireless, modular, and software solutions. Our employees leverage their insight and passion to deliver measurement solutions in wireless communications, aerospace and defense, and semiconductor markets with world-class platforms, software and consistent measurement science

This position is with the company's Semiconductor Infrastructure Solutions (SIS) organization. They are a world leader in the design and manufacture of laser interferometry systems, precision optical components, complex monolithic optics(CMOs), and advanced electronic measurement solutions. Their systems offer high precision in a wide dynamic range, the ability to simultaneously measure position with multiple degrees of freedom, and the highest accuracy available in both air and vacuum environments.

WEBCO HR, Inc. is an Equal Opportunity Employer

APPLY