Mitutoyo

Mitutoyo Research & Development America, Inc.

REQUISITION NUMBER:	2024-03
MRDA POSITION TITLE:	Engineer - Metrology
REVISION DATE:	April 2024
REPORTS TO:	Director, Technology Solutions Group
LOCATION:	Kirkland, WA
STATUS:	Exempt/Salaried; Full-time
TRAVEL:	Occasional domestic and international business travel
EDUCATION REQUIRED:	B.S. or M.S. degree in Mechanical Engineering, Electrical Engineering, Computer Science, Physics, or a related field
REQUIRED EXPERIENCE:	M.S. degree with 3 or more years or B.S. degree with 5 or more years of job experience in the field of dimensional metrology and/or mechanical or opto-mechanical engineering, software development, electro-mechanics, assembly, debug/testing
REQUIRED SKILLS:	- Knowledge of dimensional metrology concepts, techniques and working principles of metrology tools, such as CMM, vision systems, microscopes, etc. - Experience using dimensional metrology equipment - Ability to design mechanical parts and assemblies with 3D CAD and create fabrication drawings (SolidWorks, Creo Parametric, NX, CATIA, Inventor, etc.) - Hands-on experience assembling and debugging of mechanical, opto-mechanical, and electrical assemblies and systems - Practical work experience with hardware interfacing and data analysis software (such as LabView, MATLAB, Python, etc.) - Ability to set up, interface and conduct tests using laboratory equipment and prototypes - Ability to communicate designs and test results clearly and professionally through reports, plots, and presentations, including with customers - Flexibility to work in development projects, where requirements may change depending on research findings
BENEFICIAL EXPERIENCE/SKILLS:	- Programming experience with C++ and/or C# - Experience with SolidWorks, SolidWorks Simulation (or other FEA packages) and SolidWorks PDM - Experience with optical and/or opto-mechanical design - Basic machine shop skills - Familiarity with creating and managing product's bill of materials (BOM) and product revision control

	• Basic electronics assembly and test skills, soldering • Robotics, motion control, servo tuning, environmental testing • Knowledge of Japanese language and business practices
DUTIES & RESPONSIBILITIES:	• Work closely with optical, electrical, software, algorithm engineers to develop custom metrology systems from first principles of physics through detailed engineering studies and validation tests • Directly work with customers to understand system and component level requirements and specifications, and design dimensional metrology and defect inspection solutions meeting customers' requirements • Travel to customer sites for installation, integration, and training • Design and assemble mechanical, optomechanical and electro-mechanical devices and systems • Effectively interface with multi-disciplinary project teams and outside vendors and customers • Develop test systems, perform tests, and analyze data • Coordinate fabrication with MRDA machine shop personnel and outside vendors • Engage in regular, clear written and oral communication with fellow engineers, scientists, managers, suppliers, and customers

Disclaimer: The above information on this description has been designed to indicate the general nature and level of work performed by Team Members within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of Team Members assigned to this job.