

GE Global Research Center

Optical Metrology Research Engineer-Niskayuna, NY

RESPONSIBILITIES:

As an Optical Metrology Engineer, specializing in optical inspection and dimensional measurement, you will work with a diverse and talented team of engineers and scientists to conceive, design and build cutting edge optical inspection and metrology systems and methods in support of GE businesses, such as Aviation, Power & Water, Oil & Gas, and Inspection Technologies. You will be part of a global team that provides innovative solutions for industrial applications.

You will:

- Work with GRC and GE businesses team to identify Optical inspection and metrology needs and develop solutions supporting GE products.
- Formulate plans for assigned projects and work with customers to track progress toward project deliverables.
- Build Optical inspection and metrology hardware components and write software for data acquisition and analysis.
- Design and perform experiments to optimize inspection and metrology systems and evaluate manufacturing processes.
- Conduct in-plant tests using optical inspection and metrology systems to characterize manufacturing process capabilities and issues.
- Effectively communicate results by preparing written reports and delivering oral presentations.
- Contribute to the development and implementation of multi-generational technology plans for optical inspection and metrology

BASIC QUALIFICATIONS:

- Ph.D. degree in Optical Engineering, Electrical Engineering, Mechanical Engineering, Computer Science, Physics or related field. OR Master's degree in Optical Engineering, Electrical Engineering, Mechanical Engineering, Computer Science, Physics or related field with at least 2 years post degree. Or, Bachelor's degree in Optical Engineering, Electrical Engineering, Mechanical Engineering, Computer Science, Physics or related field with at least 3 years of relevant post-degree experience.
- Experience in the development of Optical inspection and metrology systems and methods.
- Working knowledge in machine vision equipment and image processing algorithms development.
- Expertise in the design, development, and testing of Optical inspection and metrology hardware components and systems.
- Demonstrated ability to independently perform analytical and laboratory research work.
- Legal authorization to work in the U.S. is required. We will not sponsor individuals at the Masters or BS level for employment visas, now or in the future, for this job opening.
- Must be willing to work out of an office located in Niskayuna, NY.
- Must be willing to take a drug test and submit to a background investigation as part of the selection process.
- Must be 18 years or older.

Desired Characteristics

- Working knowledge of metrology systems, such as CMM and surface plate testing.
- Knowledge of metrology best practices and standards, such as B89 and ANSI.
- Demonstrated experience in software development using languages, such as C, C++, LabVIEW, and MATLAB.
- Experience in the development and evaluation of manufacturing processes for shop applications.
- Experience in evaluating commercial technology against customer requirement and identifying make/buy decisions for projects.
- A record of publications in journals and conference proceedings.
- Highly innovative, self-motivated, and able to conduct research with minimal supervision and oversight.
- Excellent team work and communication skills.
- Ability to work in a multi-disciplinary environment and partner with other organizations to execute research projects.
- Influencing skills with customers, upper-level management, and project teams.

Interested? Submit your application for employment against job number **1800112 on the Careers page at <http://ge.geglobalresearch.com/careers/>**



EQUAL OPPORTUNITY EMPLOYER