Overview

Multispectral Imaging is always interested in hearing from experienced and highly qualified engineers and engineering managers with experience in uncooled infrared detector and camera manufacturing. MII offers exciting career growth opportunities in a small privately held rapidly growing company that highly values the contributions from each of its employees. Some of these openings might require U. S. citizenship or permanent residency status.

Email or fax your resume and let us explore the opportunities together.

POSITIONS AVAILABLE

Test Engineer

MII is seeking a test engineer to support MEMS prototyping activities with company employees at the Cornell NanoScale Science & Technology Facility (CNF) in Ithaca, New York. This engineer will be responsible for the design and analysis of optical and electronic measurements required for the characterization of fabricated devices. Specific responsibilities include:

1. Validation of wafer lot functionality
• Setup / maintenance of electronic test setup required to perform device electrical measurements
• Wirebonding / packaging of representative CMOS MEMS devices (with / without TEC)
• Testing for electrical functionality to validate MEMS run / lot
• Diagnosis of reasons for run failure / changes from electrical testing

2. Extraction of MEMS parameters
• Perform electrical measurements to extract parameters such as yield, paddle heights, TCC, temperature sensitivity, etc.
• Perform die level measurement of some of the above parameters using optical measurements

The following skills and experience are required:
• A Bachelor's degree in science or engineering.
• Familiarity with design and development of tests and test plans, testing, and debugging of analog and digital sensor systems.
• Good working knowledge of electronics and test equipment such as power supplies, function generators, spectrum analyzers, etc.
• Excellent hands-on skills for basic electronics tasks, with the ability to learn new skills.
• Good working knowledge of software such as Excel and Powerpoint with the ability to chart data. C / Matlab programming experience preferred.
• Excellent teamwork, communications, and documentation skills.

Thermal Imaging Applications Engineer

Multispectral Imaging Inc., with headquarters in Parsippany, New Jersey, is seeking a thermal imaging applications engineer to join a small entrepreneurial team developing new thermal infrared sensing technology using MEMS/MOEMS technology. The candidate's primary responsibilities will include:

• The integration, testing, and optimization of thermal imaging subsystems including focal plane arrays, readout integrated circuits, and camera control/video output electronics.
• Oversight of the company's integration and test laboratory.
• Specification of components required for development and preproduction subsystems.

The successful candidate will have a B.S. degree (M.S. preferred) in Electrical Engineering with 5-10 years of relevant experience. Specific requirements include:

- Extensive knowledge of readout integrated circuits and camera control/video output electronics.
- Demonstrated experience in the optimization of focal plane array and camera electronics.
- Hands-on experience in testing and qualification of infrared imaging systems.
- Experience with optical bench setup, measurement, and test.
- Facility with laboratory data acquisition and instrument control software, including Matlab and Agilent Vee.
- Facility with image analysis software tools.
- Extensive knowledge of vanadium oxide microbolometer focal plane arrays, including signal and noise performance and electronic interface issues is desirable.

Candidates interested in these positions should submit a resume and letter of interest to:

Dr. Gregory S. Maurer
VP of Engineering
Multispectral Imaging, Inc.
100 Misty Lane
Parsippany, NJ 07054

gmaurer@multispectral.net

Telephone: 973-515-7340
Fax: 973-515-7350

Modeling Scientist or Engineer

Multispectral Imaging, with headquarters in Parsippany New Jersey and a branch office in Oak Ridge Tennessee, is seeking a modeling scientist or engineer to join a small entrepreneurial team of scientists and engineers developing a new thermal infrared sensing technology using MEMS/MOEMS technology. The present position requires the applicant to work out of the Oak Ridge office. The candidate's responsibilities will include:

- The design, simulation and performance optimization of highly innovative micromechanical sensors structures for use in 1D and 2D sensor arrays for use as thermal infrared sensors and detector arrays.
- Modeling the thermal, optical, electrical and mechanical interactions and properties of the materials and sensor structures.
- Modeling the interaction of the capacitively sensed MEMS sensor structures with the CMOS electronic readout and control circuits.
- Familiarity with laboratory data acquisition and instrument control and laboratory measurement techniques would be desirable.

The successful candidate will have an M.S. or Ph.D. in electrical engineering or physics with preferably 2-5 years post graduate experience in sensor design and modeling. Recent graduates with appropriate skills obtained during a research project will also be considered. Specific requirements include:

- Experience with appropriate modeling and simulation tools such as Ansys, Comsol, Matlab, VisSim, etc.
- Experience with heat flow analyses, mechanical design and stress analysis in thin film structures.
- Experience in the design and modeling of capacitive sensing devices.

Candidates interested in this position should submit a resume and letter of interest to:

Dr. Scott R. Hunter
Chief Technology Officer
Multispectral Imaging, Inc.
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1020 Commerce park Drive,
Oak Ridge, TN 37830

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