



TEST AND VALIDATION ENGINEER I-II

REQUIRED FOR SOLAR PANEL DESIGN &
MANUFACTURING COMPANY

Position Title: Test and Validation Engineer I or II

Location: Downtown Toronto

Starting Date: Immediate/ Dependent on availability

Relevant Experience: 1-5+ years in a related position

Salary: Commensurate with experience

About Morgan Solar

Morgan Solar was founded in 2007 to develop new solar power technologies with the goal of making solar power the most widely used and affordable power source in the world. The company has tremendous potential and needs an enthusiastic, hardworking, and intelligent team to help us achieve this goal.

About the Position

The successful candidate will join Morgan Solar's Product Validation Team, working on the development and testing of MSI products including a dual-axis solar panel tracking device and solar module prototypes. The Test and Validation Engineer will play a key role in evaluating product readiness and informing product design. Key responsibilities will include test execution, data collection, analysis and reporting for prototype products in development, test design through the application of reliability engineering principles, test systems development and validation.

Due to the nature of our products, testing rapidly produces large datasets that require significant processing in order to be analyzed results. Familiarity with data processing in the languages: Python, C, C#, MySQL would be a significant asset. Testing requirements and programs are constantly evolving and the successful candidate will continually work to improve existing systems, anticipate issues and suggest solutions. Candidates with solar/semiconductor experience will be given preference.

Qualifications

Undergraduate Degree in computer science, math, statistics, or related Engineering Degree (electrical, computer, science, physics)

Minimum 1 year experience in reliability/quality engineering

Required Skills or Knowledge

- Thorough understanding of Reliability Engineering Principles
- Experience with solar cell physics
- Working knowledge of Python, C, C#, MySQL, Labview
- Experience with DOEs and statistical analyses
- Understanding of Product Development lifecycle and product Life Cycle Analysis
- Strong technical writing skills
- Thorough understanding of Failure Modes Analysis
- Competency in Microsoft products including, Excel, Word, Project, and PowerPoint required

Bonus Skills and Areas of Interest

- Computer Aided Design
- Familiarity with the installation and function of photovoltaic technologies
- Experience with RPi or Arduino an asset

You are encouraged to list any extra-curricular projects you feel are relevant.

What We Offer

- Work with a diverse team of engineers and scientists developing new technologies. Creativity and boundary-pushing are encouraged, and often see quick implementation.
- Join a motivated team, committed to making solar energy significantly more affordable and accessible. We are a global company, undertaking important projects in very interesting parts of the globe.

Skill Testing Questions – Please include response with cover letter

1. How many samples would be needed to do a full factorial DOE including two potential solar cell suppliers, two glass suppliers and four backsheet suppliers?
2. What is the difference between a 'standard' solar panel and a bifacial panel?
3. What is the difference between accuracy and precision?

To Apply

Please send a cover letter and résumé to careers@morgansolar.com, quoting job reference number [TVE12192017](#)