



## TEST AND VALIDATION ENGINEER

REQUIRED FOR SOLAR PANEL DESIGN &  
MANUFACTURING COMPANY

**Position Title:** Test and Validation Engineer

**Location:** Downtown Toronto

**Starting Date:** Immediate/ Dependent on availability

**Relevant Experience:** 2+ years in reliability engineering

**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 design through the application of reliability engineering principles, test systems development and validation, test execution, data collection, analysis and reporting.

Due to the nature of our products, testing rapidly produces large datasets that require significant processing in order to be analyzed. 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.

### Qualifications

Undergraduate Degree in computer science or a related Engineering Degree (electrical, computer, science, physics)  
Minimum 2 years experience in reliability/quality engineering

### Required Skills or Knowledge

- Thorough understanding of Reliability Engineering Principles
- 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
- Willingness to 'get your hands dirty' and competency with hand tools (machine shop) and electrical tools (multimeter, oscilloscope, soldering, SMT reworks)

### 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.

### To Apply

Please send a cover letter, résumé and answers to [careers@morgansolar.com](mailto:careers@morgansolar.com), quoting job reference number **TVE171011** in the subject line.

### Skill Testing Questions

Please include the answer in your cover letter:

1. How many samples would you need to do a full factorial DOE including: three potential solar cell suppliers, 2 potential glass suppliers and 2 possible suppliers?