



Yield and Data Software Engineer

Introduction to SOLA

SOLA is a vertically-integrated provider of solar technology, finance, and engineering expertise in Africa. SOLA grows businesses, connects communities, and helps people prosper by advancing the adoption of clean energy throughout the African continent. Our team is committed to powering Africa with clean, affordable energy.

The overall purpose of the position:

The purpose of the Yield and Data Software Engineer is to improve the efficiency of the yield assessment process and also to track the performance of our solar plants across the year. The result of this will be significant cost and time saving achieved through improved efficiency in performance monitoring and reporting on yield assessments to clients.

Description: Yield and Data Software Engineer
Reports to: Chief Technical Officer
Location: Cape Town, South Africa

Summary of Responsibilities:

- Analyze irradiance, yield, and soiling data. Compare forecasted and real-time satellite measurements to ground station measurements
- Automate monitoring and analysis of PV Projects' performance, including calculation of deemed energy.
- Refine forecasting of irradiance, yield, and soiling based on local and geographic factors.
- Manage SQL database and python scripts for data collection and reporting of PV projects
- Model and develop code to optimise and automate cleaning schedules of PV plants
- Add new and improved features to existing python-based software to visualize, alert on and store data about solar plant performance
- Troubleshooting and performance analysis of completed projects under the O&M agreement.
- Maintain SOLA O&M digital channels which are python-based implementations of: Influxdb, Chronograf, Grafana hosted on a self-managed server.

Key Performance Indicators

- Achieve yield prediction accuracy of <2%
- Soiling/cleaning accuracy of <2%
- Servers, SQL database, automation tools downtime of <2 business days

Minimum Requirements:

- At a minimum, an engineering degree.
- Substantial experience in data science, time-series data manipulation and processing, and statistical analysis would be highly advantageous.
- Substantial software development experience, specifically Python, Java, C++.
- Ability to execute on software development projects from conception to implementation.
- Experience in solar yield assessments and understanding deemed energy concepts

CLEAN ENERGY FOR AFRICA

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- Must be fully proficient in English (verbal and written communication)
- Must be fully computer literate (MS Office Suite and Google App Suite)
- The ideal candidate will be passionate about the renewable energy industry and the company's contribution to the future of energy; He/she will embody respect and responsibility in the full sense of the word and will enjoy contributing to a team of highly knowledgeable professionals.

If you are interested to apply for this vacancy, please submit your CV, academic transcript, and matric results to hireme@sola.africa

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