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Smart PV Solar System: A Review

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Abstract: The monitoring and maintenance of the solar system poses an important problem in installation and using of solar panels. To increase the efficiency of the solar panels and to optimize the usage it is necessary to clean the system regularly. Along with cleaning the system it is also essential to cool the system as an overheated system results into reduced power generation. This overheating could result into power loss and could generate less energy which reduces the overall performance of the system. The proposed system takes these problems into consideration and provides a system which not only cleans the system but also monitors the temperature to cool down the system when necessary.

Automating this system saves the valuable time and provides a regular and more thorough cleaning to the solar plates. This automated system also encourages the users to convert into using the solar energy as they don't have to clean and cool the system manually which at times could be tedious. This whole system also conserves the water which is used for both cleaning and cooling by merging both the functionalities together. This system is a step towards the sustainable future.

Keywords: Solar panels, cleaning, cooling, maintenance



