

Dual Axis Rotating Solar Panel using Internet of Things

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Abstract: *The creation of a dual-axis solar monitoring system that incorporates IoT (Internet of Things) innovations is the main topic of this study. Solar power is a clean, efficient, and renewable energy source. Solar trackers that shift photovoltaic panels in the direction of the sun can boost their energy production. This paper describes the outline and development of a dual-axis solar tracker system driven by an IoT Arduino microcontroller driving unit. A BH1750 light sensor that measures ambient light is also a part of the system. With the aid of this sensor, the solar panels may be angled optimally for optimum exposure to the sun. The system also includes an Internet of Things (IoT) monitoring system that uses an Arduino to display data like voltage and current and the electricity produced by the solar panels. This system's objectives are to increase solar panels' effectiveness and give consumers an easy way to track the operation of their solar energy systems.*

Keywords: Dual- axis Solar Panel, Internet of Things

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