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Abstract: Solar Power generation had been used as a renewable energy since year ago. Solar power as their alternative power supply will being benefit to them. This system tracks the maximum intensity of light. When the intensity of light is decreasing, this system automatically changes its direction to get maximum intensity of light. LDR light detector is used to trace the coordinate of the sun. while to rotate the appropriate position of the panel, servo motor is used. An Arduino as a main processor. This project is covered for a single axis. Finally, the project is able to track and follow the sun intensity in order to get maximum power. A variety of techniques of solar energy production used have proven that up to 30% more solar energy can be collected with a solar tracker than with a fixed solar plate system.

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