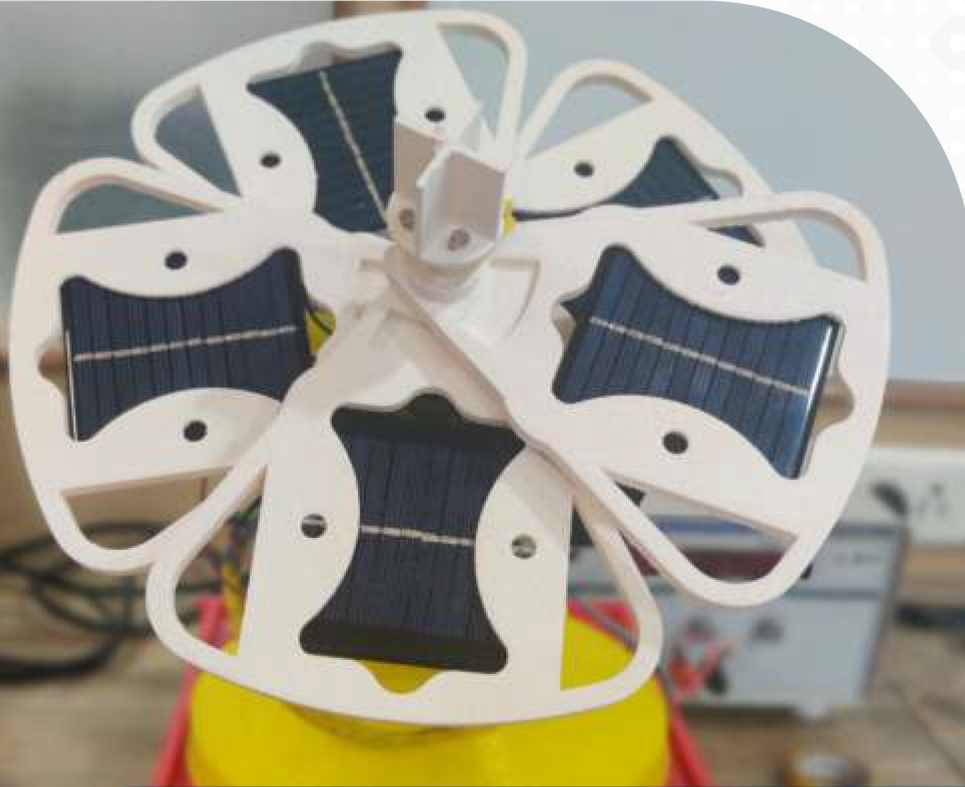


SMART SUNFLOWER SOLAR TRACKER

Fab Academy 2020 | Ms. Afsha



Description: This project aims to capture maximum intensity in minimum possible space (flower shape) and rotate whole set of solar panel in sun moving direction so that efficiency can maximize. It tracks sun movement and changes its face toward sun just like sunflower

Detail Description: Smart sunflower solar tracker uses Nema-17 stepper motor with assistance of A4988 stepper driver to open up all the petals of sunflower which are folded initially with the help of Real Time clock module DS3231. Under this design, One Petal has its own motor which moved at the sunrise in the morning and rotate the whole set of petals. These characteristics make it a better fit for the irregularities and obstacles in tracking sun rays. Sunflower Petals having five solar panel mounted on it which moves from east to west direction and north to south direction. When Light Dependent Resistor(LDR) sensor got sufficient light in that direction. The motion in both the direction takes place with Metal Gear MG-90 Servo Motor.