



**FINAL YEAR PROJECT REPORT**

**SOLAR POWERED BIKE WITH IMPROVED  
BATTERY TIMINGS AND SPEED**

In fulfillment of the requirement  
For degree of  
BEE (Electronics)

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## **SOLAR POWERED BIKE WITH IMPROVED BATTERY TIMINGS AND SPEED**

### **ABSTRACT**

The market for electric bikes, scooters and bicycles is growing with time. There are many types of bikes or Bicycles such as regular bicycle that is moved by paddling, motorized bikes that use fuel as its primary energy source to produce motion and electric bikes that use electric energy to move. However, the electric bikes available in the market have some weaknesses in design and they also lack in sufficient running time. Due to this reason the concept of developing a solar powered bike came in our mind. The basic concept was to develop a solar bike that uses electric energy from the batteries to run and charges the batteries in the same time with solar panels attached on the bike. This concept increases the running time of the bike, as it charges itself even while the bike is in use. This concept also eliminates the idea of charging the bike separately. This concept also increases the distance the bike can travel on a single charge. A high torque motor is mounted within the rim of the back tire, the motor is energized through the batteries and the batteries are charges through the solar panels. The solar panels placed on the bike are used to generate power needed to charge the batteries. The power is stored into the batteries in the form of charging and that power is used by the motor to rotate the tire. The system that is designed in the form of "Solar powered Bike" is operating efficiently.

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