

EC19603 - Problem Solving using AI and ML Techniques (Mini Project)

## ENHANCED SOLAR PANEL POWER PREDICTION THROUGH ARTIFICIAL NEURAL NETWORK

## **ABSTRACT**

The Solar Panel Power Prediction addresses the increasing demand for renewable energy by leveraging Machine Learning for precise solar panel power prediction. It develops an artificial neural network (ANN) model to predict photovoltaic (PV) output. The dataset contains environmental variables and corresponding photovoltaic (PV) output measurements which undergoes preprocessing, including feature standardization, and is then split into distinct sets for optimal Performance and accuracy. The ultimate goal is to deploy the trained ANN model for practical applications, such as forecasting PV output in renewable energy systems. It also contributes to the advancement of renewable energy technology by providing a reliable and efficient method for predicting PV output.

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