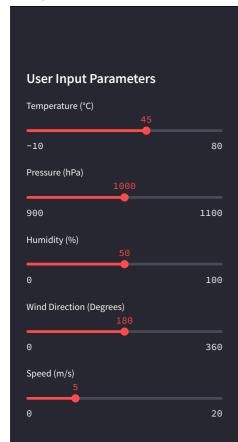
10/7/24, 7:10 PM app



# Rooftop Solar Energy Prediction & Insights

## **Prediction**

Predicted Solar Energy Output: 65.97 W

### **Model Statistics**

Mean Absolute Error (MAE): 86.10

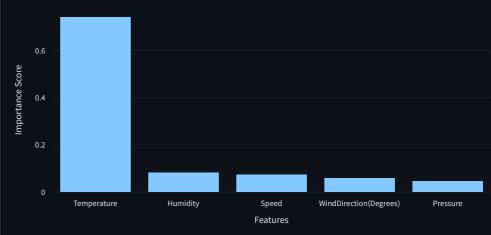
Mean Squared Error (MSE): 20983.05

R<sup>2</sup> Score: 0.79

Cross-Validation MSE: 42223.02

## **Feature Importance**

**Feature Importance** 

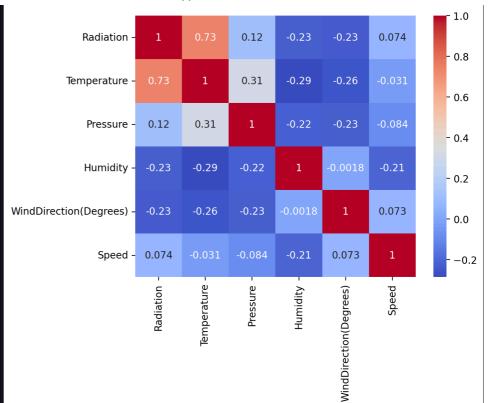


## **Data Insights and Visualizations**

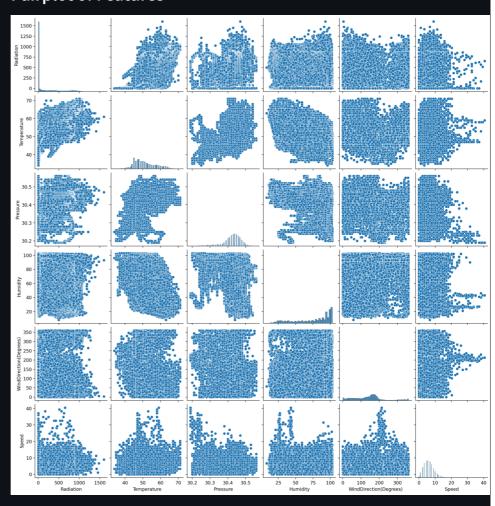
## **Correlation Heatmap**

localhost:8501 1/5



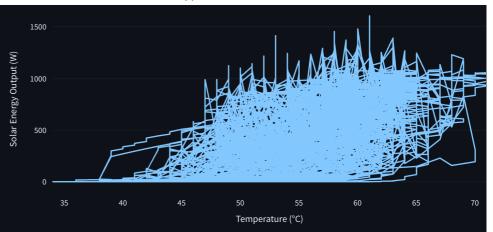


## **Pairplot of Features**



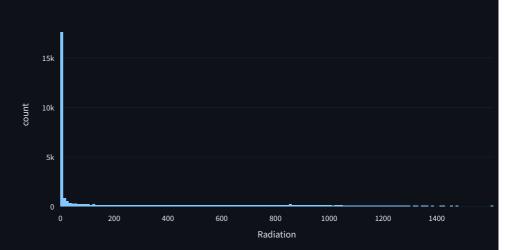
## **Solar Energy Output vs Temperature**

**Solar Energy Output vs Temperature** 

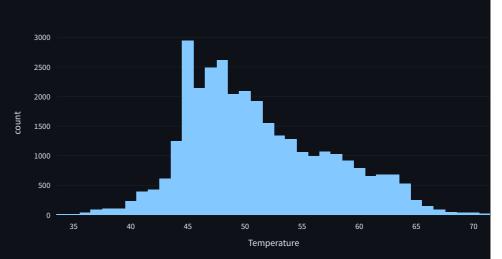


## **Feature Distribution**

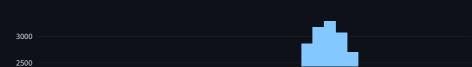
#### **Radiation Distribution**



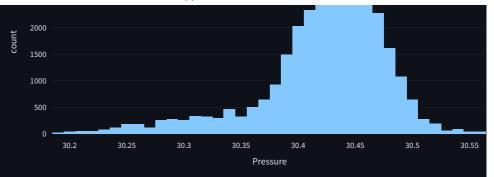
## Temperature Distribution



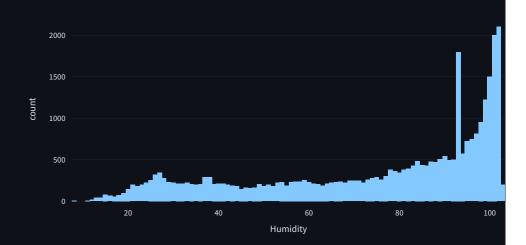
#### **Pressure Distribution**



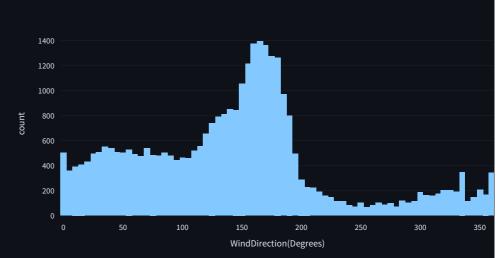
10/7/24, 7:10 PM app



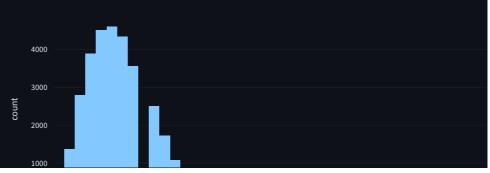
#### **Humidity Distribution**

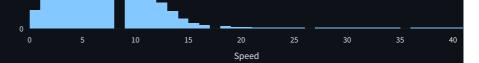


#### WindDirection(Degrees) Distribution



### **Speed Distribution**





# Actual vs Predicted

