Project Objectives

Exploratory Analysis Of RainFall Data In India For Agriculture

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Project Objectives:

Predicting the amount of daily rainfall improves agricultural productivity and secures food and water supply to keep citizens healthy. To predict rainfall, several types of research have been conducted using data mining and machine learning techniques of different countries' environmental datasets. An erratic rainfall distribution in the country affects the agriculture on which the economy of the country depends on. Wise use of rainfall water should be planned and practiced in the country to minimize the problem of the drought and flood occurred in the country. The main objective of this study is to identify the relevant atmospheric features that cause rainfall and predict the intensity of daily rainfall using machine learning techniques. The Pearson correlation technique was used to select relevant environmental variables which were used as an input for the machine learning model.The dataset was collected from the Location, MinTemp, MaxTemp, Rainfal, Evaporation, Sunshine, Temp3pm, RainToday. To measure the performance of this machine learning techniques Logistic Regression,Decision Tree Classifier, Random Forest Classifier,KNN,SVM,Xgboost

Technical Aspeccts that we would get if we complete this projects:

1. Knowledge of Machine Learning Algorithms
2. Knowledge of Python Language with Machine Learning
3. Understand about classification and regression problem

4. Know about pre-processing/clean the data using different data pre-processing techniques
5. Applying different algorithms according to the dataset and based on visualization
6. .Real-Time Analysis of Project.
7. Building ease of user Interface (uI)
8. Knowledge of building ML Models and Build web application using the Flask framework.