Exploratory Analysis Of Rainfall Data In India For Agriculture

TEAM MEMBERS

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PROBLEM STATEMENT

Weather condition plays a major role in the environment. Especially rainfall has been a major concern for the past few decades. It is important to forecast the weather to prevent disasters such as heavy floods, destruction of crops which causes harm to the human life. However on the other hand rainfall prediction can also be very useful for farmers. Predicting the rainfall and planting crops will increases the yield and food supply in our country. Using the collected previous 10 years data of rainfall we can predict the pattern of rainfall. This increases the GDP of our country and benefits the farmers with minimal loss or no loss.

ABSTRACT

Comparative study will be conducted using classification algorithms such as Decision Tree, Random Forest, KNN and xgboost. Once the data set is trained and tested with these algorithms the best among these will be selected and stores in pkl format. Once the model is saved, we integrate it with flask application and deploy the model in IBM.

LANGUAGE USED

Python

LITERATURE SURVEY

PROJECT TITLE	AUTHOR	OBJECTIVE / OUTCOME
Analysis of variability and trends of extreme rainfall events over India using 104 years of gridded daily rainfall data (Sept 20, 2008)	M. Rajeevan Jyoti Bhate A. K. Jaswal	Using the 104 years (1901-2004) rainfall data the variability and trends of extreme rainfall are analyzed.
Spatial analysis of Indian summer monsoon rainfall (March 26, 2014)	Markand Oza C. M. Kishtawal	Understanding the variability in rainfall, analysis of Indian summer monsoon rainfall using spatial resolution.
Seasonal and periodic autoregressive time series models used for forecasting analysis of rainfall data (February 7, 2020)	Sukhpal kaur Madhuchanda Rakshit	Analysis of rainfall data of Punjab using seasonal autoregressive integrated moving average and periodic autoregressive model.