

Exploratory Analysis of Rainfall Data in India for Agriculture

1. Introduction

The many research studies to analyze the Exploratory Analysis of Rainfall Data in India for Agriculture. The analyses were made using observed rainfall data from more than 3000 rain-gauge stations spread over the country for 10 years (2010-2022). The significant inferences from these studies based on the 10 years of rainfall data are as follows: The analysis of 10 years of monsoon rainfall data suggests that there is no long-term change or trend in the monsoon rainfall averaged over the country. This paper provides a survey of the existing literature survey, project use case, existing solutions, technical papers, and research publications in the area of project management using different models, Prediction, Evaluation, Machine Learning algorithms, Test Data, Data Processing, etc. Rainfall has been a significant concern these days. Weather conditions have been changing for the time being. Rainfall forecasting is the crop productivity, pre-planning of the water structures.

2. Method

A project will be developed by the Anaconda platform than the data collection. The process is referred to the official government weather climate website, Skymetweather, India Agriculture and climate Dataset, refer to some data science platforms like Kaggle, google, etc. Next will be processing the data pre-processing run using python libraries like pandas, Numpy, Seaborn, Matplotlib, etc. The training model is built to the machine learning algorithms and works with the python framework concepts. We will be using classification algorithms such as Decision tree, Random forest, KNN, and boost.

3. Result

The semantic model included 15 main entities (among them, "restoration type", "material type", "character", "comparator", and "value") and 13 main relationships and achieved an overall

precision of 93% and an overall recall of 80%. In the Discovery, a total of 165 documents (abstracts) were processed using the general reachgate papers.. The system was tested to identify the papers relevant to establish the longevity comparison between previous data and current data. The first man-made search yielded a total of 24 unique papers, 8 of which were included. The first search by a total of 18 unique papers, 9 of which were included. The two searches obtained completely different results, with only 3 papers found by current papers, but all of them potentially fit to be included in a literature review.

4. Conclusions

These preliminary results show that IBM Watson could be used to assist the researcher in performing a literature review, but the model on which Watson is trained needs to be refined to provide more extensive results. These findings will help to further refine IBM Watson's abilities and get closer to obtaining an Exploratory Analysis of Rainfall Data in India for Agriculture.

5.Reference

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