Farmer Buddy-Weather Prediction and Crop Suggestion using Artificial Neural Network on Map-Reduce Framework

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Abstract

Weather condition analysis and its prediction has always been a task of great efforts. It is tedious to predict the weather accurately. India being a country with agriculture as the primary occupation, there is an extreme need to predict data with improved accuracy. Big data comes with solution since it becomes easy and comparatively less expensive to store tremendous amount of data. This paper proposes an approach of using Hadoop for processing such Big volumes, variety and velocity of weather data. It includes application of Artificial Neural Network which is a convenient approach. ANN is implemented on Map-Reduce framework for short term rainfall prediction. Additionally, method will detect soil and Regional analysis which can also detect crop depending on user’s location. Crop data along with feasibility check of soil condition is provided so as to help farmer/users in decisive situation.

References

Index Terms

Computer Science  Artificial Intelligence

Keywords

Data mining, Crop Analysis, Artificial Neural Network, Map-Reduce Framework, Rainfall Forecasting