Chapter 19   Rainfall Prediction Based on Various Machine Learning Technologies

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Abstract

Rainfall prediction is important because heavy rainfall can lead to many disasters. The prediction helps people to take preventive measures and moreover the prediction should be accurate. Heavy precipitation prediction could be a major drawback of earth science department because it is closely related to the economy and lifetime of human. Accuracy of rainfall statement has nice importance for countries like India whose economy is basically dependent on agriculture. The dynamic nature of atmosphere, applied mathematics technique fails to provide sensible accuracy of precipitation statement. Intention of this project is to offer non-experts easy access to the techniques, approaches utilized in the sector of precipitation prediction and provide a comparative study among the various machine learning techniques.

Keywords: Rainfall; Linear Regression, KNN; Random Forest; Support vector Regression.

1. Introduction

Rainfall prediction is very important because heavy and irregular rainfall can cause many impacts like destruction of crops and farms ,damage of property so a better forecasting model is essential for an early warning that can minimize risk of life and property and also managing agricultural farm in a better way .the prediction mainly helps farmers .Rainfall prediction is a challenging task and the results should be

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