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(57) Abstract :
Rainfall is the main source of income for the majority of our country's economy. Agriculture is considered as the key source of income for the economy. A good estimate of rainfall is required to make proper agricultural investments. Rainfall forecasting is required for individuals living in coastal areas, in addition to agriculture. People living near the seaside are at a higher danger of heavy rain and flooding, therefore they should be aware of the weather forecast far in advance so that they can plan their stay accordingly. The prediction helps people in taking preventative steps, and it should also be accurate. Rainfall forecasting accuracy is important for countries like India, whose economy is heavily dependent on agriculture. To predict rainfall, a variety of machine learning models are used Multiple Linear Regression. By extracting, training, and testing data sets and identifying and predicting rainfall, these systems accomplish one of these applications. This patent proposes a rainfall prediction model based on Multiple Linear Regression (MLR) for the given dataset. Multiple meteorological parameters, such as humidity, minimum temperature, maximum temperature, pressure, cloud, wind, and so on, are included in the input data in order to estimate rainfall. The proposed model is validated using the Mean Absolute Error (MAE), accuracy, and correlation metrics. According to the results, the proposed machine learning model beats other algorithms in the literature.

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