Review on Rainfall Prediction Using Machine Learning Technique

Authors : Prachi Desai, Ankita Gandhi, Mitali Acharya

Abstract : Rainfall forecast is mainly used for predictions of rainfall in a specified area and determining their future rainfall conditions. Rainfall is always a global issue as it affects all major aspects of one's life. Agricultural, fisheries, forestry, tourism industry and other industries are widely affected by these conditions. The studies have resulted in insufficient availability of water resources and an increase in water demand in the near future. We already have a new forecast system that uses the deep Convolutional Neural Network (CNN) to forecast monthly rainfall and climate changes. We have also compared CNN against Artificial Neural Networks (ANN). Machine Learning techniques that are used in rainfall predictions include ARIMA Model, ANN, LR, SVM etc. The dataset on which we are experimenting is gathered online over the year 1901 to 20118. Test results have suggested more realistic improvements than conventional rainfall forecasts.
Keywords : ANN, CNN, supervised learning, machine learning, deep learning
Conference Title : ICCSMLDA 2022 : International Conference on Computer Science, Machine Learning and Data Analytics
Conference Location : Rio de Janeiro, Brazil
Conference Dates : March 03-04, 2022