

AIR QUALITY ANALYSIS

AIR QUALITY INDEX PREDICTION MODEL

A. SYSTEM ANALYSIS

Fine material (PM2.5) could be a important one as a result of it's a giant concern to people's health once its level within the air is comparatively high. PM2.5 refers to little particles within the air that scale back visibility and cause the air to look hazy once levels are elevated. But in the proposed system we calculate the air quality index of all the pollutants using the AQI formulae to know the air quality level in a particular city using gradient descent and Box-Plot analysis. In the proposed system the air quality index of the upcoming years can be predicted using the present AQI values.

Yearly Air quality index for India

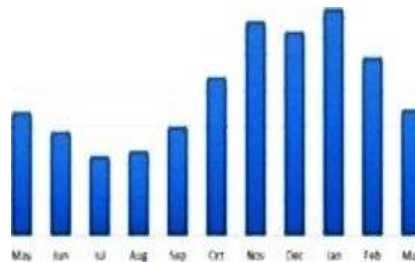


Figure 1 Air quality index

B. BACK PROPAGATION

Back propagation is a technique utilized in fake neural systems to figure an inclination that is required in the count of the loads to be utilized in the network. Back propagation is shorthand for "the retrogressive proliferation of mistakes," since a blunder is processed at the yield and appropriated in reverse all through the system's layers. It is regularly used prepare profound neural networks.

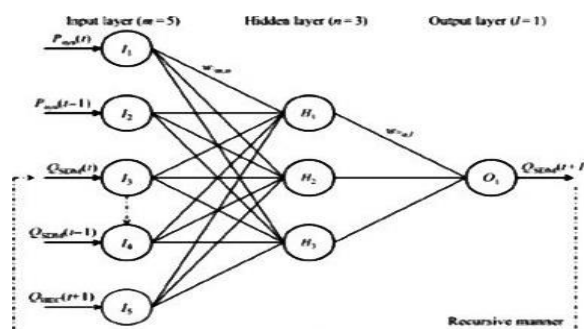


Figure 2 Neural networks

Back spread is a speculation of the delta guideline to multi-layered feed forward systems. Made conceivable by utilizing the chain principle to iteratively register angles for each layer. It is firmly identified with the Gauss— Newton calculation and is a piece of proceeding with research in neural back spread