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Prophecy of Air Quality using KNN-LSTM

Mr K. S. Raghu Kumar[1], Hemanth S[2], Swetha V[3], Sunil Naik V. S[4]
Assistant Professor, Department of Computer Science and Engineering[1]
Students, Department of Computer Science and Engineering[2,3,4]
Rao Bahadur Y Mahabaleswarappa Engineering College Bellary, Karnataka, India

Abstract: *Since the vast majority of the current air quality Index i.e (AQI) foreseeing models zeroed in on forecast of the time series information of a solitary objective observing station, they neglected to consider the connection and shared impact among the air quality checking station destinations and the spatio-transient attributes of air quality. This will prompt a specific one-sidedness during air quality expectation of a specific site. A prototype to predict the AQI for a short period of time was based on the K-nearest algorithm and long short memory was proposed. The air quality index of stations was made into data sets and fed for testing processing of data in the LSTM model whose prediction accuracy was dependent on the time correlation. Long Short-term Memory Neural Network: The Recurrent Neural Network problem which involved disappearing gradient when dealing with long term dependency came to an end with development of Long Short-Term Memory (LSTM) model .The working of this special type of RNN involves adding of additional layer of memory units such that the time series controllable and maintainable by using the 3 controllers to control the more than one memory cells in the memory units. KNN algorithm: When it comes to classification in the machine learning the K nearest neighbour algorithm stands in prominence, the algorithm works by predicting the relationship and distance between the data sets or samples given of different sort..*

Keywords: LSTM, RNN, KNN

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