AIR QUALITY PREDICTION USING MACHINE LEARNING

ABSTRACT

Air is one of the finest resources in the present environment which contains various mixture of gases. The gaseous mixture contains substances in various compositions according to the atmospheric level. The various compositions may be of Nitrogen, Oxygen, Carbon Dioxide(CO_2), Ozone (O_3), Nitrogen Dioxide (NO_2), Sulphur Dioxide (SO_2). Air is being polluted because of various activities performed by humans which causes the reduction in the quality of air. The polluted air causes various defects in human and affects the surroundings therefore air quality must be predicted. The quality of air is predicted by the composition of particulate matter which causes an adverse effect with its rise and fall. Thus the researchers introduced various technologies like machine learning, deep learning and Internet Of Things(IOT) to predict the air quality. The existing work contains limited attributes for predicting air quality. In the proposed work prediction of air quality is done by using Italian dataset and Indian dataset.The air quality in two different regions with different particulate compositon is compared and the accuracy measured is considered using DBSCAN-Linear regression algorithm.This work address in finding the research gap in existing algorithm and also the study compares the various attribute in the dataset.