ABSTRACT

Air, an essential natural resource, has been compromised in terms of quality by economic activities. Considerable research has been devoted to predicting instances of poor air quality, but most studies are limited by insufficient longitudinal data, making it difficult to account for seasonal and other factors. The Environmental Protection Agency (EPA) tracks the commonly known criteria pollutants, i.e., Ground-level Ozone (O_3), Sulphur dioxide (SO_2), Particulates matter (PM10 and PM2.5), Carbon monoxide (CO), Carbon dioxide (CO_2), and Nitrogen dioxide (NO_2).These substances are in compositions of a common index, called the Air Quality Index (AQI), indicating how clean or polluted the air is currently or forecasted to become in areas. These substances are in compositions of a common index, called the Air Quality Index (AQI), indicating how clean or polluted the air is currently or forecasted to become in areas. As the AQI increases, a higher percentage of the population is exposed. Different countries have their air quality indices, corresponding to different air quality standards. The system is developed the different machine learning algorithms for predicting the air pollution. The experimental results shows that the accuracy, precision, recall .and f1-score.