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(57) Abstract :

The present invention provides a machine learning-based air quality prediction system (100), comprising, a data acquisition unit (1) configured to import one or more datasets from one or more data sources, a data pre-processing unit (2) associated with said data acquisition unit (1) and configured to pre-process the imported dataset to obtain pre-processed data, a training and testing module (3) connected with said data pre-processing unit for dividing said pre-processed data into testing data and training data to provide training to said system (100); and a data processing unit (4) associated with said training and testing module (3) for analysis through visualization graphs using an air quality function technique, wherein a set of comparative analysis techniques are also applied to predict an air quality level.

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