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| Title | Evaluate and Predict Concentration of Particulate Matter (PM2.5) Using Machine Learning Approach | | |
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| Abstract |  |
| Particulate Matter (PM2.5) is a general term used for a mixture of solid particles and liquid droplets. PM2.5 is the utmost serious air pollutant associated with death and diseases compared to other air pollutants. Here, we have focused on the concentration of PM2.5 in Dhaka city. With the help of our proposed predictive model, we can predict Particulate Matter (PM2.5) hourly concentrations. The ambient air quality data were collected from October 2016 to March 2019. We have used Artificial Neural Network(ANN) to fill the missing value of our Dataset. And we have used the Ensemble model (StackNet) to predict PM2.5. We have acquired RMSE value 26.93 and the coefficient of the Pearson correlation (R) 0.9307 for the BARC dataset. On the other hand, for the Darussalam dataset, we have acquired RMSE value 25.36 and R-value 0.9620. | |