

The carbon dioxide level prediction:

The carbon dioxide level prediction which is basically a time series data is predicted using two models and we have taken the best one. Before that the data preprocessing steps mainly includes outlier removing, the outliers and null values are replaced with the average immediate previous and following values. And the values are scaled using MinMax scaler for model optimization and simplicity in time series. The first model is a *LSTM* model with 256 neurons and a window size 30 with activation ReLU. Following a dense model with 1 neuron acting as a output layer, it is trained using *ADAM* optimizer with MSE loss function. The second one is the *ARIMA* model by analyzing ACF and PACG plots we have used an *ARIMA* model of order (9,2,9)

Model	MSE (Mean Squared Error)
ARIMA	1.357
LSTM	11.239