

# Time Series Forecasting of Air Pollution Levels in Gandhinagar

Dhirubhai Ambani University

Course: SC475 - Time Series Analysis

Professor: Mukesh Tiwari



## Group Information

**Name:** Shravan Kakadiya

**Email:** 202201333@daiict.ac.in

**Id:** 202201333

**Name:** Jayswal Krishil

**Email:** 202203040@daiict.ac.in

**Id:** 202203040

## Abstract

Air pollution is a major environmental concern affecting public health and daily life. This project focuses on predicting the future levels of key air pollutants in Gandhinagar using time series analysis. The dataset contains daily average values of pollutants PM2.5, PM10, SO2, CO, NH3, Ozone, and CO2 from March 1, 2019, to the present. The aim is to develop a predictive model to forecast the next-days pollutant levels, which will indirectly indicate the AQI trend. The AQI index is determined based on the maximum average concentration of all pollutants recorded on a given day. By applying time series forecasting techniques like ARIMA or other relevant models, this project aims to provide insights into pollution patterns and help in better environmental planning.