**RV College of Engineering®**

**Department of M.C.A**

**Major Project (20MCA41)**

**Air Quality index using Machine learning**

Air quality of a certain region can be used as one of the major factors determining pollution index also how well the city’s industries and population is managed. urban air quality monitoring has been a constant challenge with the advent of industrialization. air pollution has remained a major challenge for the public and the government all over the world. Air pollution causes noticeable damage to the environment as well as to human health resulting into acid rain, global warming, heart diseases and skin cancer to the people. This paper addresses the challenge of predicting the Air Quality Index (AQI), with the aim to minimize the pollution before it gets adverse, using two Machine Learning Algorithms: Logistic regression, Random Forest and Decision tree.

The air pollution databases were extracted from the Central Pollution Control Board (CPCB), Ministry of Environment, Forest and Climate change, Government of India. The proposed Machine Learning (ML) model is promising in prediction context for the Delhi AQI.I have used Decision Tree, Random Forest Model and Logistic Regression algorithm is the quantified qualities of air quality are well more than the best possible values assuming appropriate public treatment. Rather than simply writing commands as normal works.

The outcome is the primary stage requires the prediction of the air quality index so that matters are improved the dataset's analysis by the supervised machine learning technique (SMLT) captures much info like variable identification, univariate analysis, bivariate, and statistical-procedure, missing price treatments, and analyzing the knowledge. We have got created six completely different/completely different classifiers throughout this project that supported different algorithms. We have created six different classifiers during this project based on different algorithms.

**LAXMIKANTH(1RV20MC036)** **GUIDE**

**Dr.B.H.Chandrashekar**

**Associate Professor**

**RV College of Engineering**