

Instructions for practical test

Data Scientist

- Problems should be solved using Python as programming language.
- Elaborate a report with your insights, supporting them with formatted data.
- Save the results on git hub and send us the link.

1. For this activity you will use the data set " Air Quality", which is available for download on: [Air Quality - UCI Machine Learning Repository](#)

This dataset presents readings of 5 metal oxide sensors, extracted between years 2004 and 2005, from a road area in Italy. The data is collected hourly.

- a. present you exploratory data analysis.
- b. Estimate Relative Humidity behavior based on its answer to other parameters.

2. For this activity you will use the date set "Car Evaluation", which is available for download on: [Car Evaluation - UCI Machine Learning Repository](#)

The Car Evaluation Database contains basic car features such as price, technical and comfort information, as well as the market acceptability of the vehicle.

- a. Provide some insights on the data such as shape, distribution and cross-category comparisons (data exploration)
- b. Given Logistic Regression, Random Forest Classifier and Decision Tree, which model performs better when predicting car class? Justify your answer with data.
- c. Rank feature importance with respect to Random Forest Model and share your insights.
- d. Present a visualization of the Decision Tree and share your insights.