Explainable Artificial Intelligence (XAI)

Advanced Topics on Machine Learning

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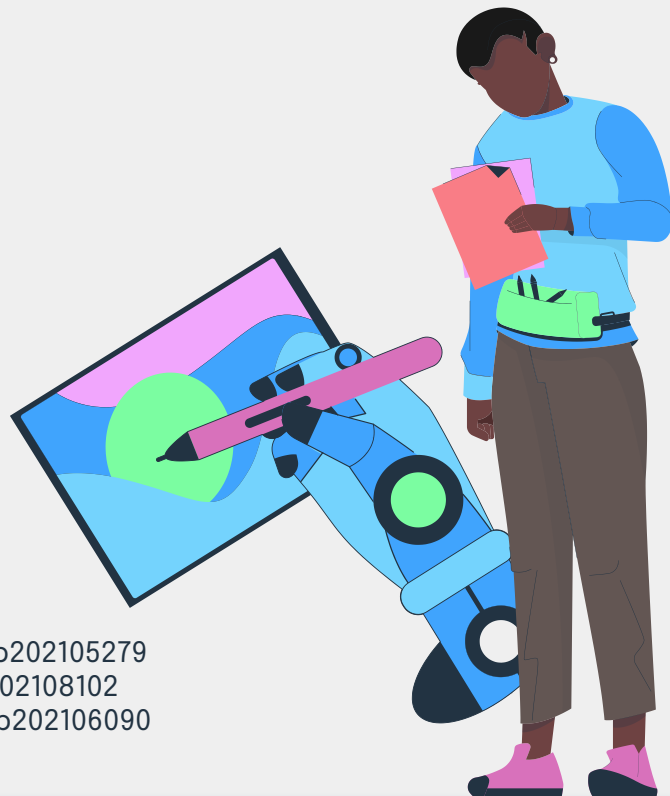
Dataset Definition

- It consists of 129,880 observations and 24 columns, with numerical and categorical variables.

- Dataset contains information related to air passenger satisfaction.

- Composed of passenger information such as Age and Gender and information about the flight and flight services.

Supervised Learning Algorithms

Glass-Box
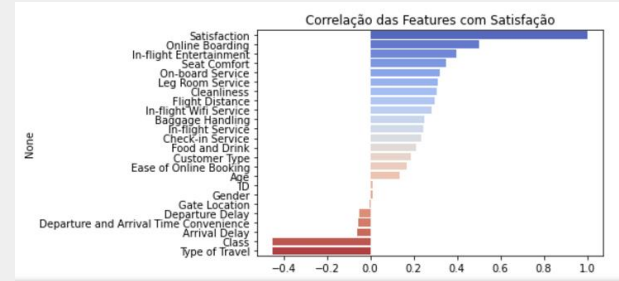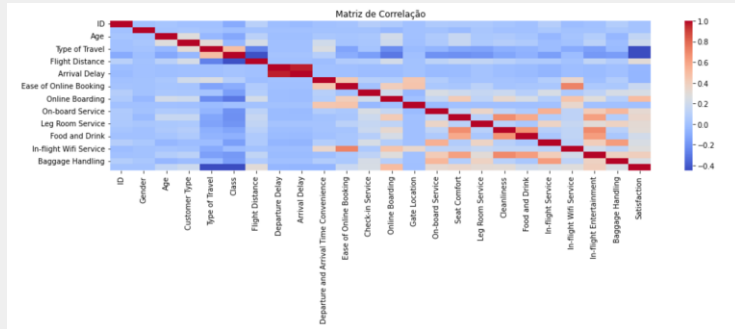
Decision Tree

Black-Box

Our idea is to use an XGBoost algorithm

- Great performance on tabular data
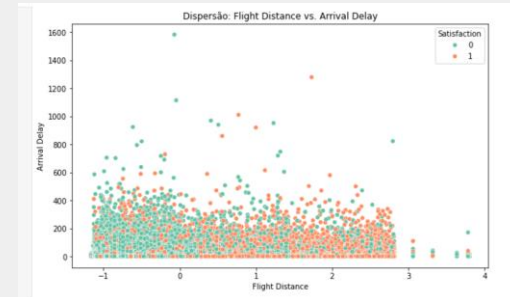- Not as complex as a neural network
- The dataset is not that big

Pre-Modelling Analysis

Correlação de Features

Matriz de Correlação

Dispersão Flight Distance / Arrival Delay

Next Steps

- Finish Task 2: In-Modeling Explanations

- Task 3: Post-Modeling Explanations

- Task 4: Quality of the explanations