



# CHECKPOINT 1

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# DATASET

## Airline Passenger Satisfaction Dataset

This dataset contains an airline passenger satisfaction survey. What factors are highly correlated to a satisfied (or dissatisfied) passenger?

### Characteristics:

- 129880 observations
- 24 features

### Target Variable:

- Satisfaction: Airline satisfaction level(Satisfaction, neutral or dissatisfaction)

### Problem Type:

- Multi-class classification problem

# PRE-MODELLING

## Airline Passenger Satisfaction Dataset

Applying methods for interpretable ML, describing the data, setting baseline expectations, trying to find instances that are representative of the data through maximum mean discrepancy (MMD)

### Techniques:

- EDA (Exploratory Data Analysis) and Visualization
- Prototypes through data summarization: MMD2-Critic



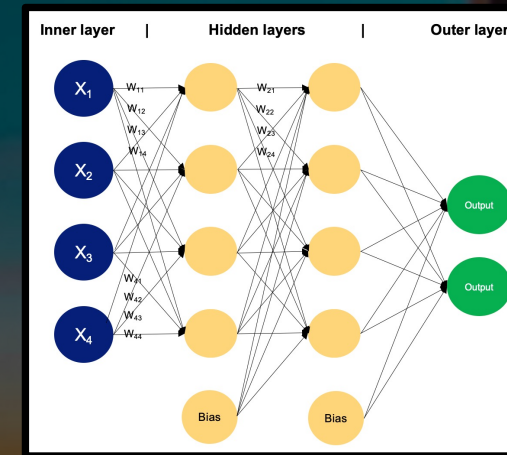
# IN-MODELLING

## Airline Passenger Satisfaction Dataset

Applying supervised multi-class classification learning models to the dataset; White Box / Black Box models,

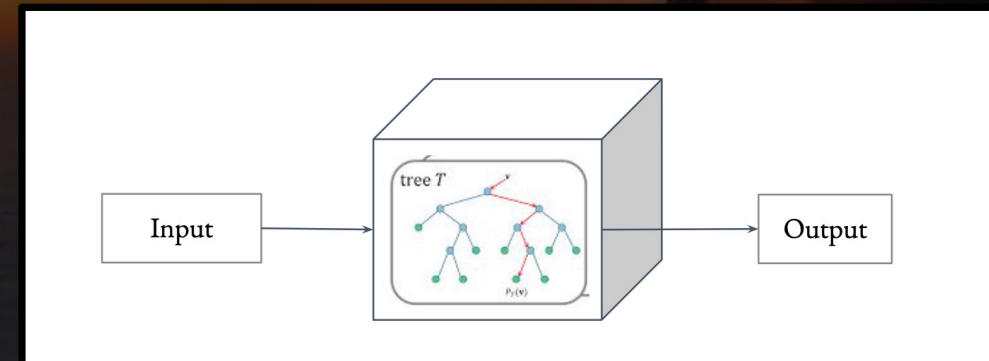
### Black Box:

- MLP (Multi-Layer Perceptron)



### White Box:

- Decision Tree
- Other rule learners (ILP?)



# BIBLIOGRAPHY

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