ML-W3-Decision Trees

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1 Decision Tree Classifier on Titanic data

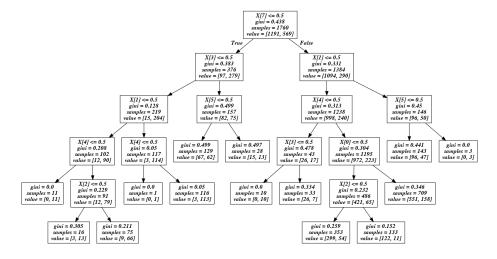


Figure 1: DT-Titanic DataSet

Test_size = 0.2 * 2201Test_Accuracy= 0.78 / 78%

2 Confusion Matrix on Titanic

$$TN = 294 \mid FP = 5 \mid FN = 89 \mid TP = 53$$

Predicted True	False	Positive
False	294	5
Positive	89	53

Table 1: Confusion Matrix - titanic

3 Decision Tree on Cardiology data

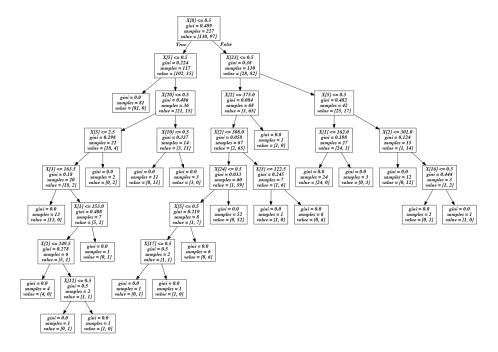


Figure 2: DT-Cardiology DataSet

$$\label{eq:Test_size} \begin{split} \text{Test_size} &= 0.25 \, * \, 303 \\ \text{Test_Accuracy} &= 0.94 \, / \, 94\% \end{split}$$

4 Confusion Matrix Cardiology DT

Predicted True	False	Positive
False	42	1
Positive	3	30

Table 2: Confusion Matrix - cardiology data

$$TN=42\mid FP=1\mid FN=3\mid TP=30$$