_top_secret_hack

Task III
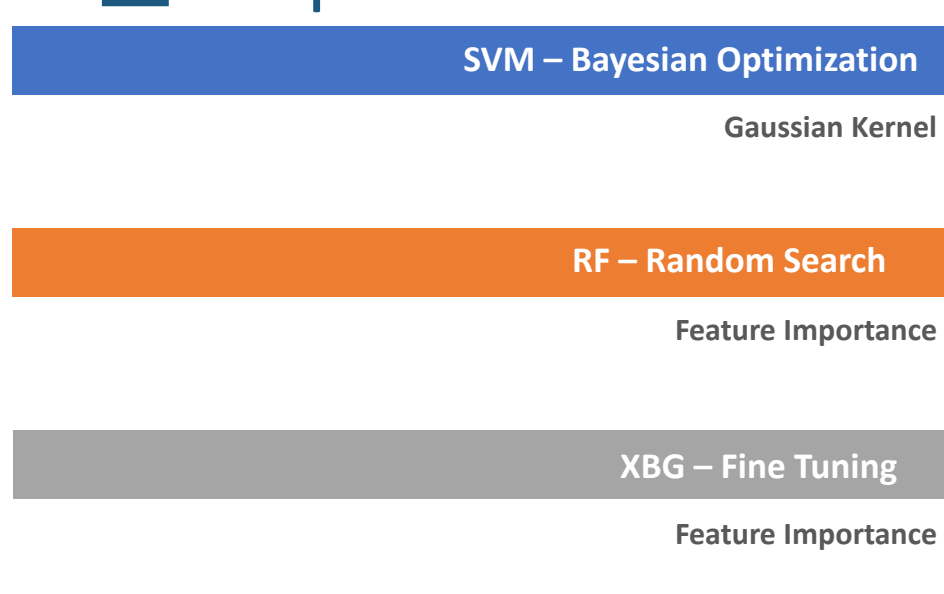
$ Anna M. W. (a.mariaw@arcor.de)
$ Thiago Viek (thiago.viek@gmail.com)
$ Florisa Zanier (florisagt@gmail.com)
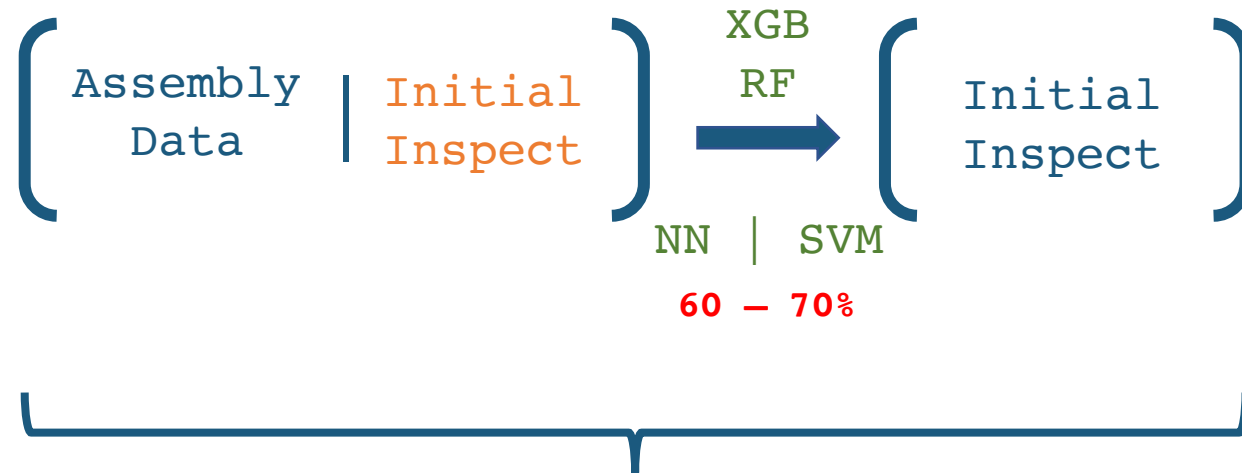
SOLUTION

$$\left(\text{Assembly Data} \;\Big|\; \text{Initial Inspect} \right) \xrightarrow{\;\;\text{XGB RF}\;\;} \left(\text{Initial Inspect} \right)$$

XGB
RF

$\rightarrow$

NN | SVM

60 − 70%

📊 Results & Discussion

➡️ All models were tested ➡️ Low R^2(0.08), ACC(23%)

➡️ Further Pre-processing procedures were necessary

Potential Improvements

➡ Correlation Analysis among Features for Dimensionality Reduction

➡ Probability Density Function ➡ Classify Outliers

➡ Regression Problem becomes a Classification Problem

$$\begin{bmatrix} \text{Features} \\ \\ \text{TOL} \end{bmatrix} \rightarrow \text{[Neural Network]} \leftarrow \begin{bmatrix} \text{Target Classes} \\ \text{Initial} \end{bmatrix} \downarrow \begin{bmatrix} \text{Target Classes} \\ \text{Final} \end{bmatrix}$$