

**Tabular  
Dataset**

**Data  
Preprocessing**

**Model  
Training**

**AI  
Prediction**

**Hypothesis  
Testing on  
Test Dataset**

**Statistical  
Tests on Test  
Dataset**

**Effect Size  
Ranking**

**If Association between  
Prediction and Feature is  
True**

$H_{0,k} : \hat{Y} \perp X_k$  versus  $H_{A,k} : \hat{Y} \not\perp X_k$ .

Final Feature Score( $X_i$ )  
 $= \text{MainEffect}_i + \sum_{j \neq i} \text{InteractionEffect}_{i,j}$

**Rank Features in  
Descending Order for  
features with Statistical  
Relevance.**

Feature Importance by Eta-squared (ANOVA)

