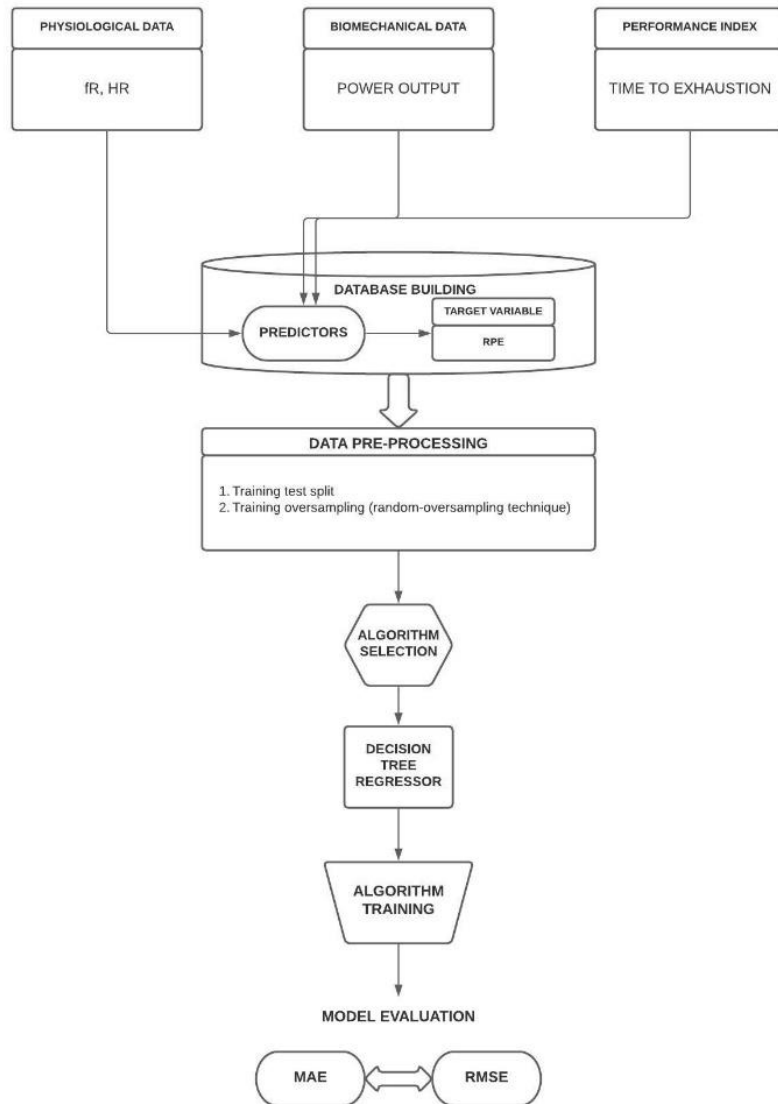


**Figure 1. Data Processing flow chart**



$f_R$  = respiratory frequency

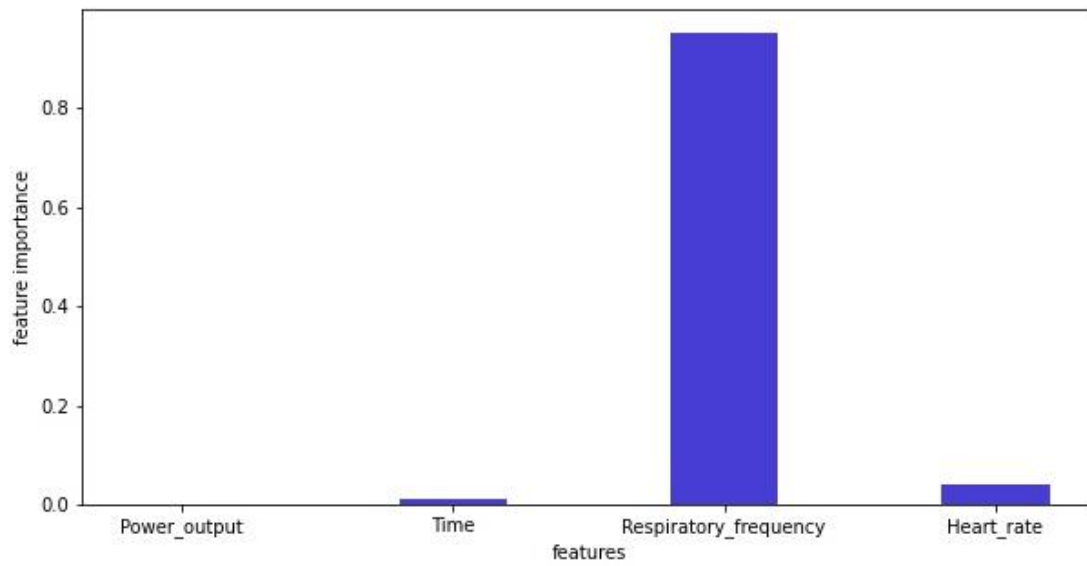
HR = heart rate

RPE = rating of perceived exertion

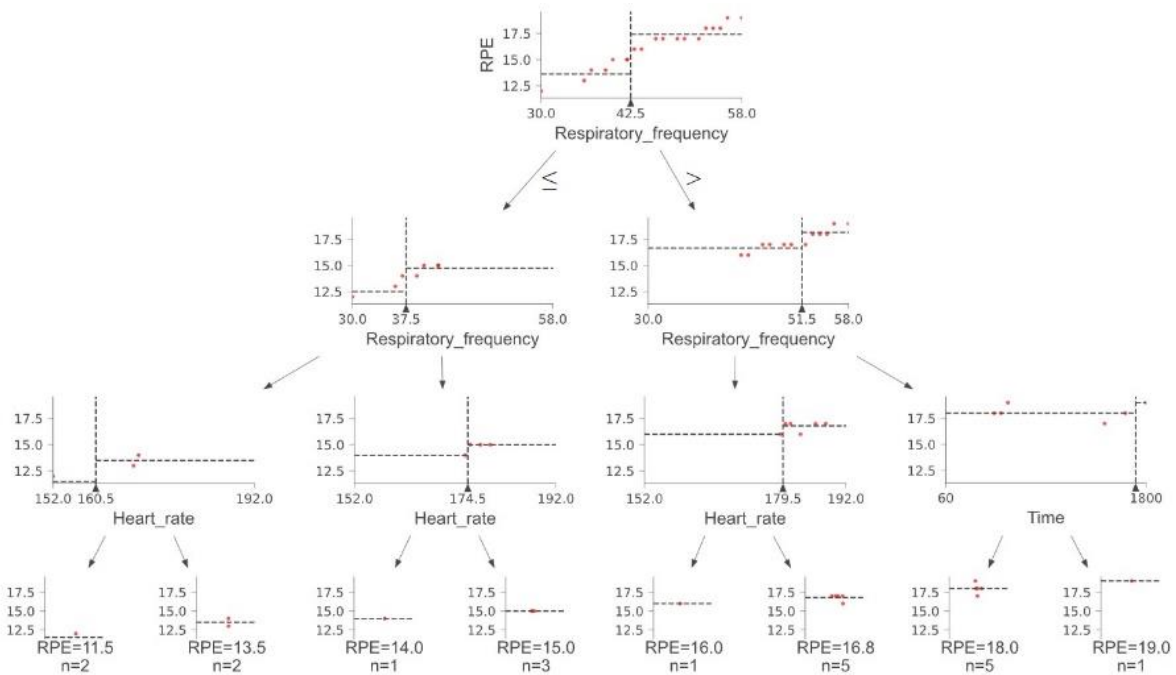
MAE = mean absolute error

RMSE = root mean squared error

**Figure 2. Feature importance analysis**



**Figure 3. Decision Tree Regressor**



DT is a directed acyclic graph consisting of a combination of internal nodes and leaf nodes. Each internal node presents a specific test that must be carried out on a single variable. In relation to the test result ( $\leq$  or  $>$  than the cut off value identified by the model), the branches indicate the possible outcomes. Therefore, starting from the root node and following the path towards the leaf nodes, it is possible to predict the outcome (RPE).