3.1.1 Objective Functions

# Original

The two objectives are the reconstruction ability (maximisation) and the complexity (minimisation). In this case, the complexity is measured as the number of splitting points in a tree. The reconstruction ability is measured as an internal (i.e. on the training set only) 3-fold (K = 3) cross-validation. Meaning the two objectives are:

Objective 1:

Where f1 is the weighted f1-score (weighted by the number of instances per class c)

Objective 2:

# Condensed

Two objectives are:

1. Reconstruction ability (maximisation)
   * The average weighted f1 metric as result of an internal (training set only) 3-fold (k=3) cross-validation on the tree
2. Complexity (minimisation)
   * Number of splitting points (nodes) in the tree

Objective 1:

Where f1 is the weighted f1-score (weighted by the number of instances per class c)

Objective 2: