

Procházka A, Vyšata O, Mareš J: ROC and Confusion Analysis

The algorithm allows statistical comparison of two sets of features acquired for negative and positive population including graphical output of their histograms and evaluation of the optimal criterion function to distinguish individuals belonging to negative and positive classes with the highest accuracy.

Evaluated and plotted outputs include also ROC curves, sensitivity and specificity values and the accuracy plot.

The proposed method is based upon confusion analysis. The algorithm is written in the MATLAB environment.

Data file FEATURES.mat includes features obtained for two sets of biomedical EMG data obtained for healthy and neuropathic individuals.