Project:

Data mining project using weka Java APIs

Usage: update class path settings Java -I weka.jar classname

Description:

This project provides an image classifier app which uses Java & Weka APIs and for reading, pre-processing and classifying data.

For the file management part, the CSV Loader will read the data from CSV file and return a weka Instance object. Then convertInstancesToArffFile method then converts the instances to arff file.

In the pre-processing portion the program, the getInstanceFromCSV api reads the class label from Y file and merge it to the instance using filters. Then FilterNumbericToNominal method will apply numeric to nominal filter on the last attribute . FilterBestAttributeSelector will perform the feature reduction in order to remove noise and reduce the dataset.

The ApplyClassifiers() trains the model using the following various classifiers options- BayesNet TAN/K2, Naive Bayes. . All relevant settings like Cross Validation etc can be applied via this method.

The output displays the confusion matrix and accuracy details like FMeasure, ROC Area and Kappa statistics.