Output of file classifier.py :- to compare features

Loading signal data file...
Loading background data file...

For features at index 0 and 1 :
Learning...
Signal Ks_2sampResult(statistic=0.016285714285714292, pvalue=0.63003198364658575)
Background Ks_2sampResult(statistic=0.014952380952380939, pvalue=0.73269718296394737)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.746090601322
Accuracy: 0.7375
Precision: 0.722447705276
Recall: 0.771333333333

For features at index 0 and 2 :
Learning...
Signal Ks_2sampResult(statistic=0.020142857142857129, pvalue=0.35846292876738906)
Background Ks_2sampResult(statistic=0.013857142857142846, pvalue=0.81227749818333028)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.82538593482
Accuracy: 0.830333333333
Precision: 0.850176678445
Recall: 0.802

For features at index 0 and 3 :
Learning...
Signal Ks_2sampResult(statistic=0.022571428571428576, pvalue=0.23231847254843552)
Background Ks_2sampResult(statistic=0.012238095238095159, pvalue=0.90991503199729173)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.868932038835
Accuracy: 0.874
Precision: 0.905346820809
Recall: 0.835333333333

For features at index 0 and 4 :
Learning...
Signal Ks_2sampResult(statistic=0.016476190476190422, pvalue=0.61531076844708255)
Background Ks_2sampResult(statistic=0.018714285714285739, pvalue=0.45042428623325664)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.773128473357
Accuracy: 0.768666666667
Precision: 0.758499037845
Recall: 0.788333333333

For features at index 0 and 5 :
Learning...
Signal Ks_2sampResult(statistic=0.014714285714285721, pvalue=0.75057348924561695)
Background Ks_2sampResult(statistic=0.015238095238095217, pvalue=0.71096482917888193)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.746866351945
Accuracy: 0.740833333333
Precision: 0.729875914731
Recall: 0.764666666667

For features at index 1 and 2 :
Learning...
Signal Ks_2sampResult(statistic=0.020000000000000018, pvalue=0.36708587156605238)
Background Ks_2sampResult(statistic=0.014285714285714263, pvalue=0.78203010870943268)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.792348840979
Accuracy: 0.7865
Precision: 0.771221205428
Recall: 0.814666666667

For features at index 1 and 3 :
Learning...
Signal Ks_2sampResult(statistic=0.022285714285714298, pvalue=0.24516896372420216)
Background Ks_2sampResult(statistic=0.015142857142857125, pvalue=0.71823785801226681)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.857692307692
Accuracy: 0.864333333333
Precision: 0.901838235294
Recall: 0.817666666667

For features at index 1 and 4 :
Learning...
Signal Ks_2sampResult(statistic=0.011809523809523825, pvalue=0.93002909229134911)
Background Ks_2sampResult(statistic=0.01709523809523808, pvalue=0.56791297213225644)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.568965517241
Accuracy: 0.583333333333
Precision: 0.589285714286
Recall: 0.55

For features at index 1 and 5 :
Learning...
Signal Ks_2sampResult(statistic=0.029714285714285749, pvalue=0.048072453643299901)
Background Ks_2sampResult(statistic=0.011190476190476195, pvalue=0.95414281988962024)
calculating F1 Score , Precision , Accuracy , Recall :

F1 score: 0.470610328638
Accuracy: 0.530166666667
Precision: 0.538924731183
Recall: 0.417666666667

For features at index 2 and 3 :
Learning...
Signal Ks_2sampResult(statistic=0.015714285714285792, pvalue=0.67429687159372897)
Background Ks_2sampResult(statistic=0.009857142857142976, pvalue=0.9864738109539396)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.894061269896
Accuracy: 0.896833333333
Precision: 0.918747801618
Recall: 0.870666666667

For features at index 2 and 4 :
Learning...
Signal Ks_2sampResult(statistic=0.015333333333333421, pvalue=0.70366732928972942)
Background Ks_2sampResult(statistic=0.013857142857142846, pvalue=0.81227749818333028)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.808734459675
Accuracy: 0.8
Precision: 0.774893097129
Recall: 0.845666666667

For features at index 2 and 5 :
Learning...
Signal Ks_2sampResult(statistic=0.017857142857142849, pvalue=0.51117310416648498)
Background Ks_2sampResult(statistic=0.020952380952380945, pvalue=0.31211704331048545)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.792458963107
Accuracy: 0.787166666667
Precision: 0.77323184269
Recall: 0.812666666667

For features at index 3 and 4 :
Learning...
Signal Ks_2sampResult(statistic=0.020952380952380945, pvalue=0.31211704331048545)
Background Ks_2sampResult(statistic=0.019523809523809554, pvalue=0.39677075934592132)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.881123792801
Accuracy: 0.887166666667
Precision: 0.930983302412
Recall: 0.836333333333

For features at index 3 and 5 :
Learning...
Signal Ks_2sampResult(statistic=0.020333333333333314, pvalue=0.34717158430873768)
Background Ks_2sampResult(statistic=0.012714285714285789, pvalue=0.88448913738084201)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.859989512323
Accuracy: 0.8665
Precision: 0.90407938258
Recall: 0.82

For features at index 4 and 5 :
Learning...
Signal Ks_2sampResult(statistic=0.014047619047619087, pvalue=0.79900503413286972)
Background Ks_2sampResult(statistic=0.0113809523809523 8, pvalue=0.94735653177062762)
calculating F1 Score , Precision , Accuracy , Recall :
F1 score: 0.584228187919
Accuracy: 0.587
Precision: 0.588175675676
Recall: 0.580333333333

Conclusion : Features at index 2 and 3 shows best results as p-value is greater than 0.5 which shows very weak evidence against null hypothesis and also the values of precision , recall , accuracy , f1-score is much better.