## NOISELESS CASE.

```
Features have been extracted.
Training completed for all features
Blind SVM results for all features
For SVM TP = 0 TN = 17 FP = 1 FN = 18 Sn = 0.000000 Sp = 0.944444 Accuracy = \checkmark
47.222222
Blind Adaboost results for all features
For SVM TP = 14 TN = 6 FP = 12 FN = 4 Sn = 0.777778 Sp = 0.333333 Accuracy = \checkmark
55.55556
Blind RF results for all features
For SVM TP = 9 TN = 13 FP = 5 FN = 9 Sn = 0.500000 Sp = 0.722222 Accuracy = 61.111111
Training completed - Transform based features only
Blind SVM results for transform based features
For SVM TP = 0 TN = 18 FP = 0 FN = 18 Sn = 0.0000000 Sp = 1.0000000 Accuracy = \checkmark
50.000000
Blind Adaboost results for transform based features
For SVM TP = 13 TN = 8 FP = 10 FN = 5 Sn = 0.722222 Sp = 0.444444 Accuracy = \checkmark
58.333333
Blind RF results for transform based features
For SVM TP = 5 TN = 7 FP = 11 FN = 13 Sn = 0.277778 Sp = 0.388889 Accuracy = \checkmark
33.333333
Training completed - Spatial features only
Blind SVM results for spatial features
For SVM TP = 4 TN = 9 FP = 9 FN = 14 Sn = 0.2222222 Sp = 0.500000 Accuracy = 36.111111
Blind Adaboost results for spatial features
For SVM TP = 14 TN = 6 FP = 12 FN = 4 Sn = 0.777778 Sp = 0.333333 Accuracy = \checkmark
55.55556
Blind RF results for spatial features
For SVM TP = 6 TN = 14 FP = 4 FN = 12 Sn = 0.3333333 Sp = 0.777778 Accuracy = \checkmark
55.55556
Training completed - Directional transform based features only
Blind SVM results for directional (frequency domain) features
For SVM TP = 1 TN = 16 FP = 2 FN = 17 Sn = 0.055556 Sp = 0.888889 Accuracy = \checkmark
47.222222
Blind Adaboost results for directional (frequency domain) features
For SVM TP = 13 TN = 13 FP = 5 FN = 5 Sn = 0.722222 Sp = 0.722222 Accuracy = \checkmark
72.22222
Blind RF results for directional (frequency domain) features
For SVM TP = 12 TN = 14 FP = 4 FN = 6 Sn = 0.666667 Sp = 0.777778 Accuracy = \checkmark
72.22222
Training completed - Non-directional transform based features only
Blind SVM results for non-directional (frequency domain) features
For SVM TP = 0 TN = 18 FP = 0 FN = 18 Sn = 0.000000 Sp = 1.000000 Accuracy = \checkmark
50.000000
Blind Adaboost results for non-directional (frequency domain) features
For SVM TP = 7 TN = 10 FP = 8 FN = 11 Sn = 0.388889 Sp = 0.555556 Accuracy = \checkmark
47.222222
Blind RF results for non-directional (frequency domain) features
```

For SVM TP = 1 TN = 12 FP = 6 FN = 17 Sn = 0.055556 Sp = 0.666667 Accuracy =  $\checkmark$  36.111111 Elapsed time is 731.939847 seconds.

NOISY - GAUSSIAN.

Features have been extracted. Training completed for all features Blind SVM results for all features For SVM TP = 0 TN = 17 FP = 1 FN = 18 Sn = 0.0000000 Sp = 0.944444 Accuracy =  $\mbox{\ensuremath{\it K}}$  47.222222 Blind Adaboost results for all features For SVM TP = 17 TN = 3 FP = 15 FN = 1 Sn = 0.944444 Sp = 0.166667 Accuracy =  $\mbox{\ensuremath{\it K}}$  55.55556 Blind RF results for all features For SVM TP = 9 TN = 14 FP = 4 FN = 9 Sn = 0.500000 Sp = 0.777778 Accuracy = 63.888889 Elapsed time is 420.557724 seconds.

## WITH ANGULAR DISTORTION.

Features have been extracted.

Training completed for all features

Blind SVM results for all features

For SVM TP = 0 TN = 17 FP = 1 FN = 18 Sn = 0.000000 Sp = 0.944444 Accuracy = \( \mathcal{L} \)

47.222222

Blind Adaboost results for all features

For SVM TP = 18 TN = 0 FP = 18 FN = 0 Sn = 1.000000 Sp = 0.000000 Accuracy = \( \mathcal{L} \)

50.000000

Blind RF results for all features

For SVM TP = 18 TN = 0 FP = 18 FN = 0 Sn = 1.000000 Sp = 0.000000 Accuracy = \( \mathcal{L} \)

50.000000

Elapsed time is 441.834727 seconds.

## WITH NOISE AND ANGULAR DISTORTION.

Features have been extracted. Training completed for all features Blind SVM results for all features For SVM TP = 1 TN = 17 FP = 1 FN = 17 Sn = 0.055556 Sp = 0.944444 Accuracy =  $\nu$  50.000000 Blind Adaboost results for all features For SVM TP = 18 TN = 0 FP = 18 FN = 0 Sn = 1.000000 Sp = 0.000000 Accuracy =  $\nu$  50.000000

```
Blind RF results for all features For SVM TP = 1 TN = 17 FP = 1 FN = 17 Sn = 0.055556 Sp = 0.944444 Accuracy = \mathbf{k} 50.000000 Elapsed time is 387.723615 seconds. Elapsed time is 387.724183 seconds. >>
```