

**Assignment 4 Feature Selection Appendices**

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October -28-2021

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## Assignment 4 Feature Selection Appendices

This experimentation implement the use of feature selection techniques (NaiveBayes in the "bayes" directory) and 5-Nearest Neighbor (IBk in the "lazy" directory, with the KNN parameter changed to 5), in comparison with the top 5, 6, 7, 8, 9, 10, 20, 50, 100, and 200 feature attributes using Information Gain, Chi Squared, Gain Ratio (GainRatioAttributeEval), Symmetric Uncertainty (SymmetricalUncertaintyAttributeEval), ReliefF (ReliefFAttributeEval with the weightByDistance parameter set to False), and ReliefF-W (ReliefFAttributeEval with the weightByDistance parameter set to True), feature rankers (InfoGainAttributeEval and ChiSquaredAttributeEval in Weka). The following is the appendices of experiment Weka experiment data for assignment 4.

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26. NaiveBayes (NB) with feature selection Chi-Square(X2) 8 features selected
  
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46. NaiveBayes (NB) with feature selection Gain Ratio(GR) 8 features selected
47. NaiveBayes (NB) with feature selection Gain Ratio(GR) 9 features selected
48. NaiveBayes (NB) with feature selection Gain Ratio(GR) 10 features selected
49. NaiveBayes (NB) with feature selection Gain Ratio(GR) 20 features selected
50. NaiveBayes (NB) with feature selection Gain Ratio(GR) 50 features selected
51. NaiveBayes (NB) with feature selection Gain Ratio(GR) 100 features selected
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56. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 8 features selected
57. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 9 features selected
58. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 10 features selected
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62. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 200 features selected
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77. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 9 features selected
78. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 10 features selected
79. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 20 features selected
80. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 50 features selected
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82. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 200 features selected

83. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 5 features selected
84. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 6 features selected
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87. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 9 features selected
88. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 10 features selected
89. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 20 features selected
90. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 50 features selected
91. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 100 features selected
92. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 200 features selected
93. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 5 features selected
94. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 6 features selected
95. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 7 features selected
96. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 8 features selected
97. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 9 features selected
98. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 10 features selected
99. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 20 features selected

100. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 50 features selected
101. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 100 features selected
102. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 200 features selected
103. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 5 features selected
104. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 6 features selected
105. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 7 features selected
106. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 8 features selected
107. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 9 features selected
108. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 10 features selected
109. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 20 features selected
110. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 50 features selected
111. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 100 features selected
112. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 200 features selected
113. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 5 features selected



114. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 6 features selected
115. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 7 features selected
116. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 8 features selected
117. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 9 features selected
118. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 10 features selected
119. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 20 features selected
120. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 50 features selected
121. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 100 features selected
122. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 200 features selected

**Data Inferences:**

## 1. NaiveBayes (NB) without feature selection

Time taken to build model: 0.08 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	79	83.1579 %
Incorrectly Classified Instances	16	16.8421 %
Kappa statistic	0.5785	
Mean absolute error	0.1715	
Root mean squared error	0.4115	
Relative absolute error	46.322 %	
Root relative squared error	95.9589 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.783	0.153	0.621	0.783	0.692	0.586	0.851	0.569	ACL
	0.847	0.217	0.924	0.847	0.884	0.586	0.842	0.916	nonACL
Weighted Avg.	0.832	0.202	0.851	0.832	0.838	0.586	0.844	0.832	

=== Confusion Matrix ===

a b <-- classified as

18 5 | a = ACL

11 61 | b = nonACL

## 2. K-nearest neighbors (KNN) without feature selection

=== Run information ===

Scheme: weka.classifiers.lazy.IBk -K 5 -W 0 -A "weka.core.neighboursearch.LinearNNSearch -A  
\"weka.core.EuclideanDistance -R first-last\""

Relation: figure1

Instances: 95

Attributes: 4027

[list of attributes omitted]

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	79	83.1579 %
Incorrectly Classified Instances	16	16.8421 %
Kappa statistic	0.5271	
Mean absolute error	0.2685	
Root mean squared error	0.3573	
Relative absolute error	72.4907 %	
Root relative squared error	83.3082 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.609	0.097	0.667	0.609	0.636	0.528	0.863	0.583	ACL
	0.903	0.391	0.878	0.903	0.890	0.528	0.863	0.947	nonACL
Weighted Avg.	0.832	0.320	0.827	0.832	0.829	0.528	0.863	0.858	

=== Confusion Matrix ===

a b <-- classified as

14 9 | a = ACL

7 65 | b = nonACL

3. NaiveBayes (NB) with feature selection Information Gain (IG) 5 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
Incorrectly Classified Instances	11	11.5789 %
Kappa statistic	0.7141	
Mean absolute error	0.1316	
Root mean squared error	0.2969	
Relative absolute error	35.5263 %	
Root relative squared error	69.2322 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.913	0.125	0.700	0.913	0.792	0.726	0.944	0.839	ACL
	0.875	0.087	0.969	0.875	0.920	0.726	0.944	0.983	nonACL
Weighted Avg.	0.884	0.096	0.904	0.884	0.889	0.726	0.944	0.948	

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

9 63 | b = nonACL

4. NaiveBayes (NB) with feature selection Information Gain (IG) 6 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	81	85.2632 %
Incorrectly Classified Instances	14	14.7368 %
Kappa statistic	0.6312	
Mean absolute error	0.1319	
Root mean squared error	0.3172	
Relative absolute error	35.6118 %	
Root relative squared error	73.9596 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0.826	0.139	0.655	0.826	0.731	0.639	0.947	0.865	ACL
0.861	0.174	0.939	0.861	0.899	0.639	0.947	0.983	nonACL
Weighted Avg.	0.853	0.165	0.871	0.853	0.858	0.639	0.947	0.955

=== Confusion Matrix ===

a b <-- classified as

19 4 | a = ACL

10 62 | b = nonACL

5. NaiveBayes (NB) with feature selection Information Gain (IG) 7 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances      84      88.4211 %

Incorrectly Classified Instances    11      11.5789 %

Kappa statistic                    0.7141

Mean absolute error                0.1221

Root mean squared error            0.3116

Relative absolute error            32.9678 %

Root relative squared error        72.6511 %

Total Number of Instances        95

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0.913	0.125	0.700	0.913	0.792	0.726	0.949	0.877	ACL

	0.875	0.087	0.969	0.875	0.920	0.726	0.949	0.982	nonACL
Weighted Avg.	0.884	0.096	0.904	0.884	0.889	0.726	0.949	0.957	

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

9 63 | b = nonACL

#### 6. NaiveBayes (NB) with feature selection Information Gain (IG) 8 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	85	89.4737 %
Incorrectly Classified Instances	10	10.5263 %
Kappa statistic	0.7366	
Mean absolute error	0.1151	
Root mean squared error	0.3105	
Relative absolute error	31.0821 %	
Root relative squared error	72.393 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===



	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.913	0.111	0.724	0.913	0.808	0.746	0.960	0.906	ACL
	0.889	0.087	0.970	0.889	0.928	0.746	0.960	0.987	nonACL
Weighted Avg.	0.895	0.093	0.910	0.895	0.899	0.746	0.960	0.967	

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

8 64 | b = nonACL

#### 7. NaiveBayes (NB) with feature selection Information Gain (IG) 9 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
Incorrectly Classified Instances	11	11.5789 %
Kappa statistic	0.7141	
Mean absolute error	0.1165	
Root mean squared error	0.3119	
Relative absolute error	31.4649 %	
Root relative squared error	72.7394 %	

Total Number of Instances      95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.913	0.125	0.700	0.913	0.792	0.726	0.944	0.902	ACL
	0.875	0.087	0.969	0.875	0.920	0.726	0.944	0.973	nonACL
Weighted Avg.	0.884	0.096	0.904	0.884	0.889	0.726	0.944	0.956	

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

9 63 | b = nonACL

8. NaiveBayes (NB) with feature selection Information Gain (IG) 10 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances      85      89.4737 %

Incorrectly Classified Instances    10      10.5263 %

Kappa statistic	0.7366
Mean absolute error	0.111
Root mean squared error	0.3094
Relative absolute error	29.9632 %
Root relative squared error	72.1474 %
Total Number of Instances	95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.913	0.111	0.724	0.913	0.808	0.746	0.944	0.914	ACL
	0.889	0.087	0.970	0.889	0.928	0.746	0.944	0.971	nonACL
Weighted Avg.	0.895	0.093	0.910	0.895	0.899	0.746	0.944	0.957	

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

8 64 | b = nonACL

#### 9. NaiveBayes (NB) with feature selection Information Gain (IG) 20 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	88	92.6316 %
Incorrectly Classified Instances	7	7.3684 %
Kappa statistic	0.813	
Mean absolute error	0.0811	
Root mean squared error	0.2652	
Relative absolute error	21.895 %	
Root relative squared error	61.834 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.957	0.083	0.786	0.957	0.863	0.820	0.968	0.933	ACL
	0.917	0.043	0.985	0.917	0.950	0.820	0.968	0.988	nonACL
Weighted Avg.	0.926	0.053	0.937	0.926	0.929	0.820	0.968	0.975	

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

6 66 | b = nonACL

10. NaiveBayes (NB) with feature selection Information Gain (IG) 50 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
Incorrectly Classified Instances	11	11.5789 %
Kappa statistic	0.7216	
Mean absolute error	0.1115	
Root mean squared error	0.3298	
Relative absolute error	30.0953 %	
Root relative squared error	76.9076 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.957	0.139	0.688	0.957	0.800	0.741	0.978	0.954	ACL
	0.861	0.043	0.984	0.861	0.919	0.741	0.965	0.979	nonACL
Weighted Avg.	0.884	0.067	0.912	0.884	0.890	0.741	0.968	0.973	

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

11. NaiveBayes (NB) with feature selection Information Gain (IG) 100 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	83	87.3684 %
Incorrectly Classified Instances	12	12.6316 %
Kappa statistic	0.7002	
Mean absolute error	0.1261	
Root mean squared error	0.3546	
Relative absolute error	34.0387 %	
Root relative squared error	82.6877 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.957	0.153	0.667	0.957	0.786	0.723	0.952	0.793	ACL
	0.847	0.043	0.984	0.847	0.910	0.723	0.956	0.978	nonACL
Weighted Avg.	0.874	0.070	0.907	0.874	0.880	0.723	0.955	0.933	

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

11 61 | b = nonACL

## 12. NaiveBayes (NB) with feature selection Information Gain (IG) 200 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	83	87.3684 %
Incorrectly Classified Instances	12	12.6316 %
Kappa statistic	0.7002	
Mean absolute error	0.1261	
Root mean squared error	0.3546	
Relative absolute error	34.0387 %	
Root relative squared error	82.6877 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
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	0.957	0.153	0.667	0.957	0.786	0.723	0.952	0.793	ACL
	0.847	0.043	0.984	0.847	0.910	0.723	0.956	0.978	nonACL
Weighted Avg.	0.874	0.070	0.907	0.874	0.880	0.723	0.955	0.933	

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

11 61 | b = nonACL

13. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 5 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
Incorrectly Classified Instances	9	9.4737 %
Kappa statistic	0.7456	
Mean absolute error	0.17	
Root mean squared error	0.2902	
Relative absolute error	45.8961 %	
Root relative squared error	67.6688 %	
Total Number of Instances	95	



=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.826	0.069	0.792	0.826	0.809	0.746	0.927	0.805	ACL
	0.931	0.174	0.944	0.931	0.937	0.746	0.927	0.963	nonACL
Weighted Avg.	0.905	0.149	0.907	0.905	0.906	0.746	0.927	0.925	

=== Confusion Matrix ===

a b <-- classified as

19 4 | a = ACL

5 67 | b = nonACL

14. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 6 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
Incorrectly Classified Instances	9	9.4737 %
Kappa statistic	0.738	
Mean absolute error	0.1637	
Root mean squared error	0.2669	
Relative absolute error	44.1984 %	

Root relative squared error      62.2443 %

Total Number of Instances      95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.783	0.056	0.818	0.783	0.800	0.738	0.960	0.867	ACL
	0.944	0.217	0.932	0.944	0.938	0.738	0.960	0.984	nonACL
Weighted Avg.	0.905	0.178	0.904	0.905	0.905	0.738	0.960	0.956	

=== Confusion Matrix ===

a b <-- classified as

18 5 | a = ACL

4 68 | b = nonACL

15. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 7 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	85	89.4737 %
Incorrectly Classified Instances	10	10.5263 %
Kappa statistic	0.6852	
Mean absolute error	0.17	
Root mean squared error	0.2916	
Relative absolute error	45.8962 %	
Root relative squared error	68.0034 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.652	0.028	0.882	0.652	0.750	0.698	0.917	0.792	ACL
	0.972	0.348	0.897	0.972	0.933	0.698	0.917	0.957	nonACL
Weighted Avg.	0.895	0.270	0.894	0.895	0.889	0.698	0.917	0.917	

=== Confusion Matrix ===

a b <-- classified as

15 8 | a = ACL

2 70 | b = nonACL

16. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 8 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7212
-----------------	--------

Mean absolute error	0.1511
---------------------	--------

Root mean squared error	0.2745
-------------------------	--------

Relative absolute error	40.8035 %
-------------------------	-----------

Root relative squared error	64.0157 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.696	0.028	0.889	0.696	0.780	0.730	0.929	0.866	ACL
	0.972	0.304	0.909	0.972	0.940	0.730	0.929	0.961	nonACL
Weighted Avg.	0.905	0.237	0.904	0.905	0.901	0.730	0.929	0.938	

=== Confusion Matrix ===

a b <-- classified as

16 7 | a = ACL

2 70 | b = nonACL

17. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 9 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
Incorrectly Classified Instances	9	9.4737 %
Kappa statistic	0.7299	
Mean absolute error	0.1574	
Root mean squared error	0.2843	
Relative absolute error	42.501 %	
Root relative squared error	66.2906 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.739	0.042	0.850	0.739	0.791	0.733	0.924	0.827	ACL
	0.958	0.261	0.920	0.958	0.939	0.733	0.924	0.960	nonACL
Weighted Avg.	0.905	0.208	0.903	0.905	0.903	0.733	0.924	0.928	

=== Confusion Matrix ===

a b <-- classified as

17 6 | a = ACL

3 69 | b = nonACL

18. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 10 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	85	89.4737 %
Incorrectly Classified Instances	10	10.5263 %
Kappa statistic	0.6951	
Mean absolute error	0.1427	
Root mean squared error	0.262	
Relative absolute error	38.5402 %	
Root relative squared error	61.098 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.696	0.042	0.842	0.696	0.762	0.700	0.939	0.879	ACL
	0.958	0.304	0.908	0.958	0.932	0.700	0.939	0.967	nonACL
Weighted Avg.	0.895	0.241	0.892	0.895	0.891	0.700	0.939	0.945	

=== Confusion Matrix ===

a b <-- classified as

16 7 | a = ACL

3 69 | b = nonACL

19. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 20 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===



Correctly Classified Instances	85	89.4737 %
Incorrectly Classified Instances	10	10.5263 %
Kappa statistic	0.6951	
Mean absolute error	0.1427	
Root mean squared error	0.262	
Relative absolute error	38.5402 %	
Root relative squared error	61.098 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.696	0.042	0.842	0.696	0.762	0.700	0.939	0.879	ACL
	0.958	0.304	0.908	0.958	0.932	0.700	0.939	0.967	nonACL
Weighted Avg.	0.895	0.241	0.892	0.895	0.891	0.700	0.939	0.945	

=== Confusion Matrix ===

a b <-- classified as

16 7 | a = ACL

3 69 | b = nonACL

20. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 50 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
Incorrectly Classified Instances	9	9.4737 %
Kappa statistic	0.7528	
Mean absolute error	0.1427	
Root mean squared error	0.2636	
Relative absolute error	38.5404 %	
Root relative squared error	61.4684 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
---------	---------	-----------	--------	-----------	-----	----------	----------	-------

	0.870	0.083	0.769	0.870	0.816	0.755	0.930	0.872	ACL
	0.917	0.130	0.957	0.917	0.936	0.755	0.930	0.964	nonACL
Weighted Avg.	0.905	0.119	0.911	0.905	0.907	0.755	0.930	0.942	

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

6 66 | b = nonACL

21. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 100 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	89	93.6842 %
--------------------------------	----	-----------

Incorrectly Classified Instances	6	6.3158 %
Kappa statistic	0.8328	
Mean absolute error	0.1302	
Root mean squared error	0.2386	
Relative absolute error	35.1453 %	
Root relative squared error	55.6299 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.913	0.056	0.840	0.913	0.875	0.834	0.956	0.937	ACL
	0.944	0.087	0.971	0.944	0.958	0.834	0.956	0.971	nonACL
Weighted Avg.	0.937	0.079	0.940	0.937	0.938	0.834	0.956	0.963	

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

4 68 | b = nonACL

22. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 200 features selected

=== Run information ===

Scheme: weka.classifiers.lazy.IBk -K 5 -W 0 -A "weka.core.neighboursearch.LinearNNSearch -A  
\"weka.core.EuclideanDistance -R first-last\""

Relation: figure1-weka.filters.supervised.attribute.AttributeSelection-

Eweka.attributeSelection.InfoGainAttributeEval-Sweka.attributeSelection.Ranker -T -  
1.7976931348623157E308 -N 200

Instances: 95

Attributes: 201

[list of attributes omitted]

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	88	92.6316 %
--------------------------------	----	-----------

Incorrectly Classified Instances	7	7.3684 %
----------------------------------	---	----------

Kappa statistic	0.8021
-----------------	--------

Mean absolute error	0.1406
Root mean squared error	0.2498
Relative absolute error	37.9745 %
Root relative squared error	58.2429 %
Total Number of Instances	95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.870	0.056	0.833	0.870	0.851	0.802	0.944	0.919	ACL
	0.944	0.130	0.958	0.944	0.951	0.802	0.944	0.966	nonACL
Weighted Avg.	0.926	0.112	0.928	0.926	0.927	0.802	0.944	0.955	

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

4 68 | b = nonACL

23. NaiveBayes (NB) with feature selection Chi-Square(X2) 5 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

Correctly Classified Instances	85	89.4737 %
Incorrectly Classified Instances	10	10.5263 %
Kappa statistic	0.7435	
Mean absolute error	0.1053	
Root mean squared error	0.3244	
Relative absolute error	28.4236 %	
Root relative squared error	75.6504 %	
Total Number of Instances	95	

Area	Class	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
	ACL	0.957	0.125	0.710	0.957	0.815	0.760	0.958	0.819

0.875	0.043	0.984	0.875	0.926	0.760	0.959	0.979	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.895	0.063	0.918	0.895	0.899	0.760	0.959	0.940
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

9 63 | b = nonACL

24. NaiveBayes (NB) with feature selection Chi-Square(X2) 6 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	85	89.4737 %
--------------------------------	----	-----------

Incorrectly Classified Instances	10	10.5263 %
----------------------------------	----	-----------



Kappa statistic	0.7435
Mean absolute error	0.1047
Root mean squared error	0.3228
Relative absolute error	28.2739 %
Root relative squared error	75.2634 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.957	0.125	0.710	0.957	0.815	0.760	0.970	0.885
								ACL
	0.875	0.043	0.984	0.875	0.926	0.760	0.967	0.981
								nonACL
Weighted Avg.	0.895	0.063	0.918	0.895	0.899	0.760	0.968	0.958

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

9 63 | b = nonACL

25. NaiveBayes (NB) with feature selection Chi-Square(X2) 7 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	88	92.6316 %
--------------------------------	----	-----------

Incorrectly Classified Instances	7	7.3684 %
----------------------------------	---	----------

Kappa statistic	0.813
-----------------	-------

Mean absolute error	0.077
---------------------	-------

Root mean squared error	0.2604
-------------------------	--------

Relative absolute error	20.7933 %
-------------------------	-----------

Root relative squared error            60.7265 %

Total Number of Instances            95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.957	0.083	0.786	0.957	0.863	0.820	0.978	0.961
ACL								
	0.917	0.043	0.985	0.917	0.950	0.820	0.968	0.981
nonACL								
Weighted Avg.	0.926	0.053	0.937	0.926	0.929	0.820	0.970	0.976

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

6 66 | b = nonACL

26. NaiveBayes (NB) with feature selection Chi-Square(X2) 8 features selected

27. NaiveBayes (NB) with feature selection Chi-Square(X2) 9 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7661
-----------------	--------

Mean absolute error	0.0843
---------------------	--------

Root mean squared error	0.2671
-------------------------	--------

Relative absolute error	22.7752 %
-------------------------	-----------

Root relative squared error	62.2814 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.957	0.111	0.733	0.957	0.830	0.779	0.978	0.961
								ACL
	0.889	0.043	0.985	0.889	0.934	0.779	0.978	0.992
								nonACL
Weighted Avg.	0.905	0.060	0.924	0.905	0.909	0.779	0.978	0.985

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

8 64 | b = nonACL

28. NaiveBayes (NB) with feature selection Chi-Square(X2) 10 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	85	89.4737 %
--------------------------------	----	-----------

Incorrectly Classified Instances	10	10.5263 %
----------------------------------	----	-----------

Kappa statistic	0.7435
-----------------	--------

Mean absolute error	0.1039
---------------------	--------

Root mean squared error	0.3016
-------------------------	--------

Relative absolute error	28.0479 %
-------------------------	-----------

Root relative squared error	70.3259 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area	Class							

0.957	0.125	0.710	0.957	0.815	0.760	0.965	0.940	ACL
-------	-------	-------	-------	-------	-------	-------	-------	-----

0.875	0.043	0.984	0.875	0.926	0.760	0.965	0.986	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.895	0.063	0.918	0.895	0.899	0.760	0.965	0.975
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

9 63 | b = nonACL

29. NaiveBayes (NB) with feature selection Chi-Square(X2) 20 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	87	91.5789 %
--------------------------------	----	-----------

Incorrectly Classified Instances	8	8.4211 %
----------------------------------	---	----------

Kappa statistic	0.7892
-----------------	--------

Mean absolute error	0.1025
---------------------	--------

Root mean squared error	0.2886
-------------------------	--------

Relative absolute error	27.691 %
-------------------------	----------

Root relative squared error	67.302 %
-----------------------------	----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.957	0.097	0.759	0.957	0.846	0.799	0.961	0.939
ACL								
	0.903	0.043	0.985	0.903	0.942	0.799	0.961	0.983
nonACL								
Weighted Avg.	0.916	0.056	0.930	0.916	0.919	0.799	0.961	0.972



==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

7 65 | b = nonACL

30. NaiveBayes (NB) with feature selection Chi-Square(X2) 50 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7596
-----------------	--------

Mean absolute error	0.1076
---------------------	--------

Root mean squared error	0.2882
-------------------------	--------

Relative absolute error	29.0421 %
Root relative squared error	67.2124 %
Total Number of Instances	95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.913	0.097	0.750	0.913	0.824	0.766	0.958	0.927
								ACL
	0.903	0.087	0.970	0.903	0.935	0.766	0.958	0.982
								nonACL
Weighted Avg.	0.905	0.089	0.917	0.905	0.908	0.766	0.958	0.969

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

7 65 | b = nonACL

31. NaiveBayes (NB) with feature selection Chi-Square(X2) 100 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.7062
-----------------	--------

Mean absolute error	0.1205
---------------------	--------

Root mean squared error	0.3072
-------------------------	--------

Relative absolute error	32.5428 %
-------------------------	-----------

Root relative squared error	71.6323 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.870	0.111	0.714	0.870	0.784	0.713	0.958	0.919	ACL
	0.889	0.130	0.955	0.889	0.921	0.713	0.958	0.984	nonACL
Weighted Avg.	0.884	0.126	0.897	0.884	0.888	0.713	0.958	0.969	

==== Confusion Matrix ====

a b <-- classified as

20 3 | a = ACL

8 64 | b = nonACL

32. NaiveBayes (NB) with feature selection Chi-Square(X2) 200 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	82	86.3158 %
--------------------------------	----	-----------

Incorrectly Classified Instances	13	13.6842 %
----------------------------------	----	-----------

Kappa statistic	0.6621
-----------------	--------

Mean absolute error	0.127
---------------------	-------

Root mean squared error	0.3167
-------------------------	--------

Relative absolute error	34.3052 %
-------------------------	-----------

Root relative squared error	73.8547 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area	Class							

0.870	0.139	0.667	0.870	0.755	0.673	0.953	0.900	ACL
-------	-------	-------	-------	-------	-------	-------	-------	-----

0.861	0.130	0.954	0.861	0.905	0.673	0.953	0.982	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.863	0.132	0.884	0.863	0.869	0.673	0.953	0.962
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

20 3 | a = ACL

10 62 | b = nonACL

33. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 5 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	83	87.3684 %
--------------------------------	----	-----------

Incorrectly Classified Instances	12	12.6316 %
----------------------------------	----	-----------

Kappa statistic	0.6839
-----------------	--------

Mean absolute error	0.1301
---------------------	--------

Root mean squared error	0.3128
-------------------------	--------

Relative absolute error	35.1345 %
-------------------------	-----------

Root relative squared error	72.9333 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.870	0.125	0.690	0.870	0.769	0.693	0.951	0.883
ACL								
	0.875	0.130	0.955	0.875	0.913	0.693	0.951	0.983
nonACL								
Weighted Avg.	0.874	0.129	0.890	0.874	0.878	0.693	0.951	0.959

==== Confusion Matrix ====

a b <-- classified as

20 3 | a = ACL

9 63 | b = nonACL

34. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 6 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	90	94.7368 %
--------------------------------	----	-----------

Incorrectly Classified Instances	5	5.2632 %
----------------------------------	---	----------

Kappa statistic	0.8544
-----------------	--------

Mean absolute error	0.126
---------------------	-------

Root mean squared error	0.2403
-------------------------	--------



Relative absolute error	34.0137 %
Root relative squared error	56.027 %
Total Number of Instances	95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.870	0.028	0.909	0.870	0.889	0.855	0.943	0.893
	0.972	0.130	0.959	0.972	0.966	0.855	0.943	0.968
Weighted Avg.	0.947	0.106	0.947	0.947	0.947	0.855	0.943	0.950

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

2 70 | b = nonACL

35. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 7 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	90	94.7368 %
--------------------------------	----	-----------

Incorrectly Classified Instances	5	5.2632 %
----------------------------------	---	----------

Kappa statistic	0.8544
-----------------	--------

Mean absolute error	0.1322
---------------------	--------

Root mean squared error	0.2497
-------------------------	--------

Relative absolute error	35.7112 %
-------------------------	-----------

Root relative squared error	58.2247 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.870	0.028	0.909	0.870	0.889	0.855	0.918	0.881
ACL								
	0.972	0.130	0.959	0.972	0.966	0.855	0.918	0.949
nonACL								
Weighted Avg.	0.947	0.106	0.947	0.947	0.947	0.855	0.918	0.932

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

2 70 | b = nonACL

36. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 8 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	88	92.6316 %
--------------------------------	----	-----------

Incorrectly Classified Instances	7	7.3684 %
----------------------------------	---	----------

Kappa statistic	0.7899
-----------------	--------

Mean absolute error	0.1071
---------------------	--------

Root mean squared error	0.2303
-------------------------	--------

Relative absolute error	28.9211 %
-------------------------	-----------

Root relative squared error	53.7098 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.783	0.028	0.900	0.783	0.837	0.793	0.952	0.921
	0.972	0.217	0.933	0.972	0.952	0.793	0.952	0.972
Weighted Avg.	0.926	0.171	0.925	0.926	0.924	0.793	0.952	0.960

==== Confusion Matrix ====

a b <-- classified as

18 5 | a = ACL

2 70 | b = nonACL

37. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 9 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	87	91.5789 %
Incorrectly Classified Instances	8	8.4211 %
Kappa statistic	0.7482	
Mean absolute error	0.1155	
Root mean squared error	0.2479	
Relative absolute error	31.1843 %	
Root relative squared error	57.797 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC	
Area									Class
0.696	0.014	0.941	0.696	0.800	0.762	0.950	0.906		ACL
0.986	0.304	0.910	0.986	0.947	0.762	0.950	0.972		nonACL

Weighted Avg. 0.916 0.234 0.918 0.916 0.911 0.762 0.950 0.956

=== Confusion Matrix ===

a b <-- classified as

16 7 | a = ACL

1 71 | b = nonACL

38. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 10 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	83	87.3684 %
--------------------------------	----	-----------

Incorrectly Classified Instances	12	12.6316 %
----------------------------------	----	-----------

Kappa statistic	0.6453
-----------------	--------

Mean absolute error	0.1469
---------------------	--------

Root mean squared error	0.2805
-------------------------	--------

Relative absolute error	39.6718 %
-------------------------	-----------

Root relative squared error	65.4094 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====



	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.696	0.069	0.762	0.696	0.727	0.646	0.927	0.837
	0.931	0.304	0.905	0.931	0.918	0.646	0.927	0.963
Weighted Avg.	0.874	0.247	0.871	0.874	0.872	0.646	0.927	0.932

==== Confusion Matrix ====

a b <-- classified as

16 7 | a = ACL

5 67 | b = nonACL

39. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 20 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	84	88.4211 %
Incorrectly Classified Instances	11	11.5789 %
Kappa statistic	0.6797	
Mean absolute error	0.1364	
Root mean squared error	0.2628	
Relative absolute error	36.8426 %	
Root relative squared error	61.2703 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.739	0.069	0.773	0.739	0.756	0.680	0.938	0.875
ACL								
	0.931	0.261	0.918	0.931	0.924	0.680	0.938	0.966
nonACL								

Weighted Avg. 0.884 0.215 0.883 0.884 0.883 0.680 0.938 0.944

==== Confusion Matrix ====

a b <-- classified as

17 6 | a = ACL

5 67 | b = nonACL

40. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 50 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	85	89.4737 %
--------------------------------	----	-----------

Incorrectly Classified Instances	10	10.5263 %
----------------------------------	----	-----------

Kappa statistic	0.7132
-----------------	--------

Mean absolute error	0.1448
Root mean squared error	0.266
Relative absolute error	39.1061 %
Root relative squared error	62.0234 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.783	0.069	0.783	0.783	0.783	0.713	0.934	0.866
								ACL
	0.931	0.217	0.931	0.931	0.931	0.713	0.934	0.964
								nonACL
Weighted Avg.	0.895	0.182	0.895	0.895	0.895	0.713	0.934	0.940

==== Confusion Matrix ====

a b <-- classified as

18 5 | a = ACL

5 67 | b = nonACL

41. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 100 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.6797
-----------------	--------

Mean absolute error	0.1427
---------------------	--------

Root mean squared error	0.2745
-------------------------	--------

Relative absolute error	38.5402 %
-------------------------	-----------

Root relative squared error	63.9991 %
-----------------------------	-----------

Total Number of Instances            95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.739	0.069	0.773	0.739	0.756	0.680	0.927	0.858
								ACL
	0.931	0.261	0.918	0.931	0.924	0.680	0.927	0.961
								nonACL
Weighted Avg.	0.884	0.215	0.883	0.884	0.883	0.680	0.927	0.936

==== Confusion Matrix ====

a b <-- classified as

17 6 | a = ACL

5 67 | b = nonACL

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	85	89.4737 %
--------------------------------	----	-----------

Incorrectly Classified Instances	10	10.5263 %
----------------------------------	----	-----------

Kappa statistic	0.6951
-----------------	--------

Mean absolute error	0.1616
---------------------	--------

Root mean squared error	0.2901
Relative absolute error	43.6327 %
Root relative squared error	67.6533 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.696	0.042	0.842	0.696	0.762	0.700	0.918	0.808
ACL								
	0.958	0.304	0.908	0.958	0.932	0.700	0.918	0.958
nonACL								
Weighted Avg.	0.895	0.241	0.892	0.895	0.891	0.700	0.918	0.922

==== Confusion Matrix ====

a b <-- classified as



16 7 | a = ACL

3 69 | b = nonACL

42. K-nearest neighbors (KNN) with feature selection Chi-Square(X2) 200 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.6797
-----------------	--------

Mean absolute error	0.1804
---------------------	--------

Root mean squared error	0.3184
-------------------------	--------

Relative absolute error	48.7251 %
-------------------------	-----------

Root relative squared error	74.2405 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.739	0.069	0.773	0.739	0.756	0.680	0.887	0.753
								ACL
	0.931	0.261	0.918	0.931	0.924	0.680	0.887	0.942
								nonACL
Weighted Avg.	0.884	0.215	0.883	0.884	0.883	0.680	0.887	0.896

=== Confusion Matrix ===

a b <-- classified as

17 6 | a = ACL

5 67 | b = nonACL

43. NaiveBayes (NB) with feature selection Gain Ratio(GR) 5 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	85	89.4737 %
Incorrectly Classified Instances	10	10.5263 %
Kappa statistic	0.7435	
Mean absolute error	0.1108	
Root mean squared error	0.3271	
Relative absolute error	29.9241 %	
Root relative squared error	76.2705 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.957	0.125	0.710	0.957	0.815	0.760	0.969	0.866	ACL
	0.875	0.043	0.984	0.875	0.926	0.760	0.966	0.981	nonACL
Weighted Avg.	0.895	0.063	0.918	0.895	0.899	0.760	0.967	0.953	

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

9 63 | b = nonACL

#### 44. NaiveBayes (NB) with feature selection Gain Ratio(GR) 6 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
Incorrectly Classified Instances	9	9.4737 %
Kappa statistic	0.7661	
Mean absolute error	0.0967	
Root mean squared error	0.2989	
Relative absolute error	26.1185 %	
Root relative squared error	69.6992 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.957	0.111	0.733	0.957	0.830	0.779	0.977	0.927	ACL
	0.889	0.043	0.985	0.889	0.934	0.779	0.968	0.981	nonACL
Weighted Avg.	0.905	0.060	0.924	0.905	0.909	0.779	0.970	0.968	

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

8 64 | b = nonACL

#### 45. NaiveBayes (NB) with feature selection Gain Ratio(GR) 7 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	90	94.7368 %
--------------------------------	----	-----------

Incorrectly Classified Instances	5	5.2632 %
----------------------------------	---	----------

Kappa statistic	0.8627
-----------------	--------

Mean absolute error	0.0595
---------------------	--------

Root mean squared error	0.2181
-------------------------	--------

Relative absolute error	16.059 %
-------------------------	----------

Root relative squared error	50.8555 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.957	0.056	0.846	0.957	0.898	0.866	0.977	0.959	ACL
	0.944	0.043	0.986	0.944	0.965	0.866	0.966	0.979	nonACL
Weighted Avg.	0.947	0.046	0.952	0.947	0.948	0.866	0.969	0.974	

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

4 68 | b = nonACL

46. NaiveBayes (NB) with feature selection Gain Ratio(GR) 8 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	89	93.6842 %
--------------------------------	----	-----------

Incorrectly Classified Instances	6	6.3158 %
----------------------------------	---	----------

Kappa statistic	0.8328
-----------------	--------

Mean absolute error	0.0702
---------------------	--------

Root mean squared error	0.2357
-------------------------	--------

Relative absolute error	18.9597 %
-------------------------	-----------

Root relative squared error	54.9568 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
---------	---------	-----------	--------	-----------	-----	----------	----------	-------

	0.913	0.056	0.840	0.913	0.875	0.834	0.970	0.954	ACL
	0.944	0.087	0.971	0.944	0.958	0.834	0.970	0.988	nonACL
Weighted Avg.	0.937	0.079	0.940	0.937	0.938	0.834	0.970	0.980	

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

4 68 | b = nonACL

47. NaiveBayes (NB) with feature selection Gain Ratio(GR) 9 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	82	86.3158 %
Incorrectly Classified Instances	13	13.6842 %
Kappa statistic	0.6528	
Mean absolute error	0.1525	
Root mean squared error	0.3213	
Relative absolute error	41.1702 %	
Root relative squared error	74.912 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.826	0.125	0.679	0.826	0.745	0.659	0.923	0.864	ACL
	0.875	0.174	0.940	0.875	0.906	0.659	0.923	0.965	nonACL
Weighted Avg.	0.863	0.162	0.877	0.863	0.867	0.659	0.923	0.940	

=== Confusion Matrix ===

a b <-- classified as

19 4 | a = ACL

9 63 | b = nonACL

48. NaiveBayes (NB) with feature selection Gain Ratio(GR) 10 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	83	87.3684 %
Incorrectly Classified Instances	12	12.6316 %
Kappa statistic	0.675	
Mean absolute error	0.1472	
Root mean squared error	0.307	



Relative absolute error	39.747 %
Root relative squared error	71.5978 %
Total Number of Instances	95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.826	0.111	0.704	0.826	0.760	0.679	0.926	0.886	ACL
	0.889	0.174	0.941	0.889	0.914	0.679	0.926	0.965	nonACL
Weighted Avg.	0.874	0.159	0.884	0.874	0.877	0.679	0.926	0.946	

=== Confusion Matrix ===

a b <-- classified as

19 4 | a = ACL

8 64 | b = nonACL

49. NaiveBayes (NB) with feature selection Gain Ratio(GR) 20 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	75	78.9474 %
Incorrectly Classified Instances	20	21.0526 %

Kappa statistic	0.4263
Mean absolute error	0.2133
Root mean squared error	0.3929
Relative absolute error	57.6106 %
Root relative squared error	91.6197 %
Total Number of Instances	95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.565	0.139	0.565	0.565	0.565	0.426	0.830	0.703	ACL
	0.861	0.435	0.861	0.861	0.861	0.426	0.830	0.933	nonACL
Weighted Avg.	0.789	0.363	0.789	0.789	0.789	0.426	0.830	0.877	

=== Confusion Matrix ===

a b <-- classified as

13 10 | a = ACL

10 62 | b = nonACL

50. NaiveBayes (NB) with feature selection Gain Ratio(GR) 50 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	77	81.0526 %
Incorrectly Classified Instances	18	18.9474 %
Kappa statistic	0.4985	
Mean absolute error	0.2169	
Root mean squared error	0.3828	
Relative absolute error	58.5725 %	
Root relative squared error	89.2591 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.652	0.139	0.600	0.652	0.625	0.499	0.827	0.694	ACL
	0.861	0.348	0.886	0.861	0.873	0.499	0.827	0.927	nonACL
Weighted Avg.	0.811	0.297	0.817	0.811	0.813	0.499	0.827	0.871	

=== Confusion Matrix ===

a b <-- classified as

15 8 | a = ACL

10 62 | b = nonACL

51. NaiveBayes (NB) with feature selection Gain Ratio(GR) 100 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	73	76.8421 %
Incorrectly Classified Instances	22	23.1579 %
Kappa statistic	0.3871	
Mean absolute error	0.2358	
Root mean squared error	0.4044	
Relative absolute error	63.6673 %	
Root relative squared error	94.2931 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.565	0.167	0.520	0.565	0.542	0.388	0.817	0.687	ACL
	0.833	0.435	0.857	0.833	0.845	0.388	0.817	0.922	nonACL
Weighted Avg.	0.768	0.370	0.776	0.768	0.772	0.388	0.817	0.865	

=== Confusion Matrix ===

a b <-- classified as

13 10 | a = ACL

12 60 | b = nonACL

## 52. NaiveBayes (NB) with feature selection Gain Ratio(GR) 200 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	75	78.9474 %
Incorrectly Classified Instances	20	21.0526 %
Kappa statistic	0.4088	
Mean absolute error	0.2288	
Root mean squared error	0.3869	
Relative absolute error	61.786 %	
Root relative squared error	90.2169 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.522	0.125	0.571	0.522	0.545	0.410	0.830	0.690	ACL
	0.875	0.478	0.851	0.875	0.863	0.410	0.830	0.931	nonACL
Weighted Avg.	0.789	0.393	0.784	0.789	0.786	0.410	0.830	0.873	

=== Confusion Matrix ===

a b <-- classified as

12 11 | a = ACL

9 63 | b = nonACL

53. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 5 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	88	92.6316 %
--------------------------------	----	-----------

Incorrectly Classified Instances	7	7.3684 %
----------------------------------	---	----------

Kappa statistic	0.8021
-----------------	--------

Mean absolute error	0.1532
---------------------	--------

Root mean squared error	0.2645
-------------------------	--------

Relative absolute error	41.3696 %
-------------------------	-----------

Root relative squared error	61.6741 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0.870	0.056	0.833	0.870	0.851	0.802	0.920	0.907	ACL

	0.944	0.130	0.958	0.944	0.951	0.802	0.920	0.947	nonACL
Weighted Avg.	0.926	0.112	0.928	0.926	0.927	0.802	0.920	0.937	

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

4 68 | b = nonACL

54. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 6 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	88	92.6316 %
Incorrectly Classified Instances	7	7.3684 %
Kappa statistic	0.7962	
Mean absolute error	0.1385	
Root mean squared error	0.2506	
Relative absolute error	37.4088 %	
Root relative squared error	58.4327 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.826	0.042	0.864	0.826	0.844	0.797	0.942	0.902	ACL
	0.958	0.174	0.945	0.958	0.952	0.797	0.942	0.966	nonACL
Weighted Avg.	0.926	0.142	0.925	0.926	0.926	0.797	0.942	0.951	

=== Confusion Matrix ===

a b <-- classified as

19 4 | a = ACL

3 69 | b = nonACL

55. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 7 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===



Correctly Classified Instances	89	93.6842 %
Incorrectly Classified Instances	6	6.3158 %
Kappa statistic	0.8171	
Mean absolute error	0.1302	
Root mean squared error	0.2666	
Relative absolute error	35.1453 %	
Root relative squared error	62.1763 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.783	0.014	0.947	0.783	0.857	0.823	0.912	0.862	ACL
	0.986	0.217	0.934	0.986	0.959	0.823	0.912	0.949	nonACL
Weighted Avg.	0.937	0.168	0.937	0.937	0.935	0.823	0.912	0.928	

=== Confusion Matrix ===

a b <-- classified as

18 5 | a = ACL

1 71 | b = nonACL

56. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 8 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
Incorrectly Classified Instances	9	9.4737 %
Kappa statistic	0.712	
Mean absolute error	0.1406	
Root mean squared error	0.2752	
Relative absolute error	37.9743 %	
Root relative squared error	64.1719 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.652	0.014	0.938	0.652	0.769	0.731	0.906	0.866	ACL
	0.986	0.348	0.899	0.986	0.940	0.731	0.906	0.943	nonACL
Weighted Avg.	0.905	0.267	0.908	0.905	0.899	0.731	0.906	0.924	

=== Confusion Matrix ===

a b <-- classified as

15 8 | a = ACL

1 71 | b = nonACL

57. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 9 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
Incorrectly Classified Instances	11	11.5789 %
Kappa statistic	0.648	
Mean absolute error	0.1532	
Root mean squared error	0.2929	
Relative absolute error	41.3693 %	
Root relative squared error	68.305 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.609	0.028	0.875	0.609	0.718	0.665	0.921	0.806	ACL
	0.972	0.391	0.886	0.972	0.927	0.665	0.921	0.961	nonACL
Weighted Avg.	0.884	0.303	0.883	0.884	0.877	0.665	0.921	0.923	

=== Confusion Matrix ===

a b <-- classified as

14 9 | a = ACL

2 70 | b = nonACL

58. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 10 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	83	87.3684 %
Incorrectly Classified Instances	12	12.6316 %
Kappa statistic	0.6096	
Mean absolute error	0.1469	
Root mean squared error	0.2922	
Relative absolute error	39.6719 %	
Root relative squared error	68.1271 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0.565	0.028	0.867	0.565	0.684	0.631	0.924	0.821	ACL

	0.972	0.435	0.875	0.972	0.921	0.631	0.924	0.962	nonACL
Weighted Avg.	0.874	0.336	0.873	0.874	0.864	0.631	0.924	0.928	

=== Confusion Matrix ===

a b <-- classified as

13 10 | a = ACL

2 70 | b = nonACL

59. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 20 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	79	83.1579 %
Incorrectly Classified Instances	16	16.8421 %
Kappa statistic	0.3987	
Mean absolute error	0.2161	
Root mean squared error	0.3587	
Relative absolute error	58.3446 %	
Root relative squared error	83.6361 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.304	0.000	1.000	0.304	0.467	0.499	0.812	0.662	ACL
	1.000	0.696	0.818	1.000	0.900	0.499	0.812	0.899	nonACL
Weighted Avg.	0.832	0.527	0.862	0.832	0.795	0.499	0.812	0.842	

=== Confusion Matrix ===

a b <-- classified as

7 16 | a = ACL

0 72 | b = nonACL

60. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 50 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	78	82.1053 %
Incorrectly Classified Instances	17	17.8947 %
Kappa statistic	0.3733	
Mean absolute error	0.214	
Root mean squared error	0.365	
Relative absolute error	57.7788 %	

Root relative squared error      85.1116 %

Total Number of Instances      95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.304	0.014	0.875	0.304	0.452	0.448	0.811	0.620	ACL
	0.986	0.696	0.816	0.986	0.893	0.448	0.811	0.912	nonACL
Weighted Avg.	0.821	0.531	0.830	0.821	0.786	0.448	0.811	0.841	

=== Confusion Matrix ===

a b <-- classified as

7 16 | a = ACL

1 71 | b = nonACL

61. K-nearest neighbors (KNN) with feature selection Gain Ratio(GR) 100 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances      78      82.1053 %

Incorrectly Classified Instances    17      17.8947 %

Kappa statistic	0.3733
Mean absolute error	0.2056
Root mean squared error	0.345
Relative absolute error	55.5153 %
Root relative squared error	80.4406 %
Total Number of Instances	95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.304	0.014	0.875	0.304	0.452	0.448	0.853	0.709	ACL
	0.986	0.696	0.816	0.986	0.893	0.448	0.853	0.927	nonACL
Weighted Avg.	0.821	0.531	0.830	0.821	0.786	0.448	0.853	0.874	

=== Confusion Matrix ===

a b <-- classified as

7 16 | a = ACL

1 71 | b = nonACL

62. K-nearest neighbors (KNN) with feature selection Information Gain (IG) 200 features selected

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification



Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	79	83.1579 %
Incorrectly Classified Instances	16	16.8421 %
Kappa statistic	0.4212	
Mean absolute error	0.2161	
Root mean squared error	0.3528	
Relative absolute error	58.3446 %	
Root relative squared error	82.2692 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.348	0.014	0.889	0.348	0.500	0.488	0.825	0.670	ACL
	0.986	0.652	0.826	0.986	0.899	0.488	0.825	0.915	nonACL
Weighted Avg.	0.832	0.498	0.841	0.832	0.802	0.488	0.825	0.856	

=== Confusion Matrix ===

a b <-- classified as

8 15 | a = ACL

1 71 | b = nonACL

63. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 5 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.7216
-----------------	--------

Mean absolute error	0.1155
---------------------	--------

Root mean squared error	0.3395
-------------------------	--------

Relative absolute error	31.1914 %
-------------------------	-----------

Root relative squared error        79.1576 %

Total Number of Instances        95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.957	0.139	0.688	0.957	0.800	0.741	0.962	0.833   ACL
	0.861	0.043	0.984	0.861	0.919	0.741	0.964	0.980   nonACL
Weighted Avg.	0.884	0.067	0.912	0.884	0.890	0.741	0.964	0.945

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

10 62 | b = nonACL

64. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 6 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7661
-----------------	--------

Mean absolute error	0.0914
---------------------	--------

Root mean squared error	0.2946
-------------------------	--------

Relative absolute error	24.6874 %
-------------------------	-----------

Root relative squared error	68.7005 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.957	0.111	0.733	0.957	0.830	0.779	0.981	0.935
								ACL
	0.889	0.043	0.985	0.889	0.934	0.779	0.970	0.982
								nonACL
Weighted Avg.	0.905	0.060	0.924	0.905	0.909	0.779	0.972	0.970

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

8 64 | b = nonACL

65. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 7 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7661
-----------------	--------

Mean absolute error	0.0917
---------------------	--------

Root mean squared error	0.2978
-------------------------	--------

Relative absolute error	24.7616 %
-------------------------	-----------

Root relative squared error	69.4425 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.957	0.111	0.733	0.957	0.830	0.779	0.981	0.964	ACL

0.889	0.043	0.985	0.889	0.934	0.779	0.967	0.980	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.905	0.060	0.924	0.905	0.909	0.779	0.971	0.976
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

8 64 | b = nonACL

66. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 8 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	87	91.5789 %
--------------------------------	----	-----------

Incorrectly Classified Instances	8	8.4211 %
----------------------------------	---	----------

Kappa statistic	0.7892
Mean absolute error	0.0709
Root mean squared error	0.2363
Relative absolute error	19.1535 %
Root relative squared error	55.1125 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.957	0.097	0.759	0.957	0.846	0.799	0.977	0.970
ACL								
	0.903	0.043	0.985	0.903	0.942	0.799	0.977	0.990
nonACL								
Weighted Avg.	0.916	0.056	0.930	0.916	0.919	0.799	0.977	0.985

==== Confusion Matrix ====



a b <-- classified as

22 1 | a = ACL

7 65 | b = nonACL

67. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 9 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7661
-----------------	--------

Mean absolute error	0.1013
---------------------	--------

Root mean squared error	0.2895
-------------------------	--------

Relative absolute error	27.3656 %
-------------------------	-----------

Root relative squared error      67.4969 %

Total Number of Instances      95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.957	0.111	0.733	0.957	0.830	0.779	0.969	0.954
ACL								
	0.889	0.043	0.985	0.889	0.934	0.779	0.969	0.986
nonACL								
Weighted Avg.	0.905	0.060	0.924	0.905	0.909	0.779	0.969	0.978

=== Confusion Matrix ===

a b <-- classified as

22 1 | a = ACL

68. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 10 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	85	89.4737 %
--------------------------------	----	-----------

Incorrectly Classified Instances	10	10.5263 %
----------------------------------	----	-----------

Kappa statistic	0.7435
-----------------	--------

Mean absolute error	0.1024
---------------------	--------

Root mean squared error	0.2937
-------------------------	--------

Relative absolute error	27.6413 %
-------------------------	-----------

Root relative squared error	68.4862 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.957	0.125	0.710	0.957	0.815	0.760	0.970	0.951 ACL
	0.875	0.043	0.984	0.875	0.926	0.760	0.970	0.988 nonACL
Weighted Avg.	0.895	0.063	0.918	0.895	0.899	0.760	0.970	0.979

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

9 63 | b = nonACL

69. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 20 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	85	89.4737 %
Incorrectly Classified Instances	10	10.5263 %
Kappa statistic	0.7435	
Mean absolute error	0.116	
Root mean squared error	0.3047	
Relative absolute error	31.3142 %	
Root relative squared error	71.0614 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC	
Area									Class
0.957	0.125	0.710	0.957	0.815	0.760	0.966	0.943		ACL
0.875	0.043	0.984	0.875	0.926	0.760	0.966	0.986		nonACL

Weighted Avg.   0.895   0.063   0.918     0.895   0.899   0.760   0.966   0.976

==== Confusion Matrix ====

a   b   <-- classified as

22   1   |   a = ACL

9   63   |   b = nonACL

70. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 50 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.7141
-----------------	--------

Mean absolute error	0.1088
Root mean squared error	0.2888
Relative absolute error	29.3923 %
Root relative squared error	67.3383 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC	
Area									Class
0.913	0.125	0.700	0.913	0.792	0.726	0.963	0.942		ACL
0.875	0.087	0.969	0.875	0.920	0.726	0.963	0.985		nonACL
Weighted Avg.	0.884	0.096	0.904	0.884	0.889	0.726	0.963	0.974	

==== Confusion Matrix ====

a b <-- classified as

21 2 | a = ACL

9 63 | b = nonACL

71. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 100 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7596
-----------------	--------

Mean absolute error	0.1056
---------------------	--------

Root mean squared error	0.2755
-------------------------	--------

Relative absolute error	28.5109 %
-------------------------	-----------

Root relative squared error	64.242 %
-----------------------------	----------



Total Number of Instances            95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.913	0.097	0.750	0.913	0.824	0.766	0.969	0.947    ACL
	0.903	0.087	0.970	0.903	0.935	0.766	0.969	0.988    nonACL
Weighted Avg.	0.905	0.089	0.917	0.905	0.908	0.766	0.969	0.978

==== Confusion Matrix ====

a   b   <-- classified as

21   2   |   a = ACL

7   65   |   b = nonACL

72. NaiveBayes (NB) with feature selection Symmetric Uncertainty(SUA) 200 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	87	91.5789 %
--------------------------------	----	-----------

Incorrectly Classified Instances	8	8.4211 %
----------------------------------	---	----------

Kappa statistic	0.7771
-----------------	--------

Mean absolute error	0.1083
---------------------	--------

Root mean squared error	0.2747
-------------------------	--------

Relative absolute error	29.2471 %
-------------------------	-----------

Root relative squared error	64.0543 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.870	0.069	0.800	0.870	0.833	0.778	0.961	0.922
								ACL
	0.931	0.130	0.957	0.931	0.944	0.778	0.961	0.986
								nonACL
Weighted Avg.	0.916	0.116	0.919	0.916	0.917	0.778	0.961	0.971

==== Confusion Matrix ====

a b <-- classified as

20 3 | a = ACL

5 67 | b = nonACL

73. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 5 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	89	93.6842 %
--------------------------------	----	-----------

Incorrectly Classified Instances	6	6.3158 %
----------------------------------	---	----------

Kappa statistic	0.8279
-----------------	--------

Mean absolute error	0.1406
---------------------	--------

Root mean squared error	0.2447
-------------------------	--------

Relative absolute error	37.9745 %
-------------------------	-----------

Root relative squared error	57.0627 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area	Class							

0.870	0.042	0.870	0.870	0.870	0.828	0.944	0.911	ACL
-------	-------	-------	-------	-------	-------	-------	-------	-----

0.958	0.130	0.958	0.958	0.958	0.828	0.944	0.967	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.937	0.109	0.937	0.937	0.937	0.828	0.944	0.953
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

20 3 | a = ACL

3 69 | b = nonACL

74. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 6 features  
selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	88	92.6316 %
Incorrectly Classified Instances	7	7.3684 %
Kappa statistic	0.8077	
Mean absolute error	0.1155	
Root mean squared error	0.234	
Relative absolute error	31.1845 %	
Root relative squared error	54.5673 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.913	0.069	0.808	0.913	0.857	0.811	0.954	0.927
ACL								
	0.931	0.087	0.971	0.931	0.950	0.811	0.954	0.971
nonACL								
Weighted Avg.	0.926	0.083	0.931	0.926	0.928	0.811	0.954	0.961

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

5 67 | b = nonACL

75. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 7 features  
selected

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	89	93.6842 %
--------------------------------	----	-----------

Incorrectly Classified Instances	6	6.3158 %
----------------------------------	---	----------

Kappa statistic	0.8328
-----------------	--------

Mean absolute error	0.1218
---------------------	--------

Root mean squared error	0.2367
-------------------------	--------

Relative absolute error	32.882 %
-------------------------	----------

Root relative squared error	55.2017 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area	Class							



0.913	0.056	0.840	0.913	0.875	0.834	0.949	0.905	ACL
-------	-------	-------	-------	-------	-------	-------	-------	-----

0.944	0.087	0.971	0.944	0.958	0.834	0.949	0.970	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.937	0.079	0.940	0.937	0.938	0.834	0.949	0.954
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

21 2 | a = ACL

4 68 | b = nonACL

76. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 8 features  
selected

Test mode: 10-fold cross-validation

==== Classifier model (full training set) ====

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.738
-----------------	-------

Mean absolute error	0.1281
---------------------	--------

Root mean squared error	0.253
-------------------------	-------

Relative absolute error	34.5794 %
-------------------------	-----------

Root relative squared error	58.9895 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.783	0.056	0.818	0.783	0.800	0.738	0.941	0.885
								ACL
	0.944	0.217	0.932	0.944	0.938	0.738	0.941	0.967
								nonACL
Weighted Avg.	0.905	0.178	0.904	0.905	0.905	0.738	0.941	0.947

=== Confusion Matrix ===

a b <-- classified as

18 5 | a = ACL

4 68 | b = nonACL

77. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 9 features  
selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7212
-----------------	--------

Mean absolute error	0.1281
---------------------	--------

Root mean squared error	0.2546
-------------------------	--------

Relative absolute error	34.5793 %
-------------------------	-----------

Root relative squared error	59.3728 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.696	0.028	0.889	0.696	0.780	0.730	0.944	0.898
	0.972	0.304	0.909	0.972	0.940	0.730	0.944	0.968
Weighted Avg.	0.905	0.237	0.904	0.905	0.901	0.730	0.944	0.951

==== Confusion Matrix ====

a b <-- classified as

16 7 | a = ACL

2 70 | b = nonACL

78. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 10 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.6593
-----------------	--------

Mean absolute error	0.1406
---------------------	--------

Root mean squared error	0.2722
-------------------------	--------

Relative absolute error	37.9743 %
-------------------------	-----------

Root relative squared error	63.461 %
-----------------------------	----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.652	0.042	0.833	0.652	0.732	0.667	0.934	0.865
	0.958	0.348	0.896	0.958	0.926	0.667	0.934	0.965
Weighted Avg.	0.884	0.274	0.881	0.884	0.879	0.667	0.934	0.941

==== Confusion Matrix ====

a b <-- classified as

15 8 | a = ACL

3 69 | b = nonACL

79. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 20 features

selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	85	89.4737 %
--------------------------------	----	-----------

Incorrectly Classified Instances	10	10.5263 %
----------------------------------	----	-----------

Kappa statistic	0.7132
-----------------	--------

Mean absolute error	0.1469
---------------------	--------

Root mean squared error	0.2835
-------------------------	--------

Relative absolute error	39.6718 %
-------------------------	-----------

Root relative squared error	66.0993 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area	Class							



	0.783	0.069	0.783	0.783	0.783	0.713	0.920	0.824	ACL
	0.931	0.217	0.931	0.931	0.931	0.713	0.920	0.959	nonACL
Weighted Avg.	0.895	0.182	0.895	0.895	0.895	0.713	0.920	0.927	

==== Confusion Matrix ====

a b <-- classified as

18 5 | a = ACL

5 67 | b = nonACL

80. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 50 features  
selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	87	91.5789 %
Incorrectly Classified Instances	8	8.4211 %
Kappa statistic	0.7635	
Mean absolute error	0.1364	
Root mean squared error	0.2659	
Relative absolute error	36.8426 %	
Root relative squared error	62.0063 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.783	0.042	0.857	0.783	0.818	0.765	0.938	0.877
ACL								
	0.958	0.217	0.932	0.958	0.945	0.765	0.938	0.966
nonACL								
Weighted Avg.	0.916	0.175	0.914	0.916	0.914	0.765	0.938	0.945

==== Confusion Matrix ====

a b <-- classified as

18 5 | a = ACL

3 69 | b = nonACL

81. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 100 features  
selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7299
Mean absolute error	0.1448
Root mean squared error	0.2856
Relative absolute error	39.1059 %
Root relative squared error	66.6078 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.739	0.042	0.850	0.739	0.791	0.733	0.918	0.826
ACL								
	0.958	0.261	0.920	0.958	0.939	0.733	0.918	0.955
nonACL								
Weighted Avg.	0.905	0.208	0.903	0.905	0.903	0.733	0.918	0.924

==== Confusion Matrix ====

a b <-- classified as

17 6 | a = ACL

3 69 | b = nonACL

82. K-nearest neighbors (KNN) with feature selection Symmetric Uncertainty(SUA) 200 features  
selected

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

### === Summary ===

Correctly Classified Instances	87	91.5789 %
--------------------------------	----	-----------

Incorrectly Classified Instances	8	8.4211 %
----------------------------------	---	----------

Kappa statistic	0.7561
-----------------	--------

Mean absolute error	0.1406
---------------------	--------

Root mean squared error	0.258
-------------------------	-------

Relative absolute error 37.9743 %

Root relative squared error	60.1582 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								

0.739 0.028 0.895 0.739 0.810 0.762 0.957 0.886 ACL

0.972	0.261	0.921	0.972	0.946	0.762	0.957	0.983	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.916	0.204	0.915	0.916	0.913	0.762	0.957	0.959
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

17 6 | a = ACL

2 70 | b = nonACL

83. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 5 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	83	87.3684 %
--------------------------------	----	-----------

Incorrectly Classified Instances	12	12.6316 %
----------------------------------	----	-----------

Kappa statistic	0.6839
Mean absolute error	0.1376
Root mean squared error	0.3199
Relative absolute error	37.1524 %
Root relative squared error	74.6054 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.870	0.125	0.690	0.870	0.769	0.693	0.958	0.918
								ACL
	0.875	0.130	0.955	0.875	0.913	0.693	0.958	0.986
								nonACL
Weighted Avg.	0.874	0.129	0.890	0.874	0.878	0.693	0.958	0.969

==== Confusion Matrix ====



a b <-- classified as

20 3 | a = ACL

9 63 | b = nonACL

84. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 6 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	83	87.3684 %
--------------------------------	----	-----------

Incorrectly Classified Instances	12	12.6316 %
----------------------------------	----	-----------

Kappa statistic	0.6839
-----------------	--------

Mean absolute error	0.1226
---------------------	--------

Root mean squared error	0.2994
-------------------------	--------

Relative absolute error	33.1189 %
-------------------------	-----------

Root relative squared error      69.8053 %

Total Number of Instances      95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.870	0.125	0.690	0.870	0.769	0.693	0.961	0.917
								ACL
	0.875	0.130	0.955	0.875	0.913	0.693	0.961	0.987
								nonACL
Weighted Avg.	0.874	0.129	0.890	0.874	0.878	0.693	0.961	0.970

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

9 63 | b = nonACL

85. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 7 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7596
-----------------	--------

Mean absolute error	0.1115
---------------------	--------

Root mean squared error	0.2887
-------------------------	--------

Relative absolute error	30.1043 %
-------------------------	-----------

Root relative squared error	67.312 %
-----------------------------	----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.913	0.097	0.750	0.913	0.824	0.766	0.961	0.899
								ACL
	0.903	0.087	0.970	0.903	0.935	0.766	0.961	0.988
								nonACL
Weighted Avg.	0.905	0.089	0.917	0.905	0.908	0.766	0.961	0.966

==== Confusion Matrix ====

a b <-- classified as

21 2 | a = ACL

7 65 | b = nonACL

86. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 8 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

### === Summary ===

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.7141
-----------------	--------

Mean absolute error	0.1185
---------------------	--------

Root mean squared error	0.3021
-------------------------	--------

Relative absolute error	31.9862 %
-------------------------	-----------

Root relative squared error	70.4559 %
-----------------------------	-----------

Total Number of Instances 95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area
Class								

0.913 0.125 0.700 0.913 0.792 0.726 0.960 0.906 ACL

0.875 0.087 0.969 0.875 0.920 0.726 0.960 0.987 nonACL

Weighted Avg. 0.884 0.096 0.904 0.884 0.889 0.726 0.960 0.967

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

9 63 | b = nonACL

87. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 9 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	85	89.4737 %
--------------------------------	----	-----------

Incorrectly Classified Instances	10	10.5263 %
----------------------------------	----	-----------

Kappa statistic	0.7366
Mean absolute error	0.1086
Root mean squared error	0.2975
Relative absolute error	29.3269 %
Root relative squared error	69.3814 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.913	0.111	0.724	0.913	0.808	0.746	0.966	0.914
								ACL
	0.889	0.087	0.970	0.889	0.928	0.746	0.966	0.989
								nonACL
Weighted Avg.	0.895	0.093	0.910	0.895	0.899	0.746	0.966	0.971

==== Confusion Matrix ====

a b <-- classified as

21 2 | a = ACL

88. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 10 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.7141
-----------------	--------

Mean absolute error	0.1186
---------------------	--------

Root mean squared error	0.3142
-------------------------	--------

Relative absolute error	32.0365 %
-------------------------	-----------



Root relative squared error        73.2741 %

Total Number of Instances        95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.913	0.125	0.700	0.913	0.792	0.726	0.957	0.895
								ACL
	0.875	0.087	0.969	0.875	0.920	0.726	0.957	0.986
								nonACL
Weighted Avg.	0.884	0.096	0.904	0.884	0.889	0.726	0.957	0.964

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL

9 63 | b = nonACL

89. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 20 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	81	85.2632 %
--------------------------------	----	-----------

Incorrectly Classified Instances	14	14.7368 %
----------------------------------	----	-----------

Kappa statistic	0.6502
-----------------	--------

Mean absolute error	0.143
---------------------	-------

Root mean squared error	0.3594
-------------------------	--------

Relative absolute error	38.6107 %
-------------------------	-----------

Root relative squared error	83.8125 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.913	0.167	0.636	0.913	0.750	0.671	0.944	0.930
								ACL
	0.833	0.087	0.968	0.833	0.896	0.671	0.949	0.970
								nonACL
Weighted Avg.	0.853	0.106	0.888	0.853	0.860	0.671	0.948	0.960

==== Confusion Matrix ====

a b <-- classified as

21 2 | a = ACL

12 60 | b = nonACL

90. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 50 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	80	84.2105 %
--------------------------------	----	-----------

Incorrectly Classified Instances	15	15.7895 %
----------------------------------	----	-----------

Kappa statistic	0.6391
-----------------	--------

Mean absolute error	0.1595
---------------------	--------

Root mean squared error	0.3893
-------------------------	--------

Relative absolute error	43.0795 %
-------------------------	-----------

Root relative squared error	90.7859 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area	Class							

0.957	0.194	0.611	0.957	0.746	0.673	0.944	0.881	ACL
-------	-------	-------	-------	-------	-------	-------	-------	-----

0.806	0.043	0.983	0.806	0.885	0.673	0.936	0.970	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.842	0.080	0.893	0.842	0.852	0.673	0.938	0.948
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

14 58 | b = nonACL

91. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 100 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	80	84.2105 %
--------------------------------	----	-----------

Incorrectly Classified Instances	15	15.7895 %
----------------------------------	----	-----------

Kappa statistic	0.6391
-----------------	--------

Mean absolute error	0.1612
---------------------	--------

Root mean squared error	0.3972
-------------------------	--------

Relative absolute error	43.5171 %
-------------------------	-----------

Root relative squared error	92.6177 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.957	0.194	0.611	0.957	0.746	0.673	0.964	0.906
ACL								
	0.806	0.043	0.983	0.806	0.885	0.673	0.958	0.977
nonACL								
Weighted Avg.	0.842	0.080	0.893	0.842	0.852	0.673	0.959	0.960

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

14 58 | b = nonACL

92. NaiveBayes (NB) with feature selection ReliefF-set to false (RF-f) 200 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	77	81.0526 %
--------------------------------	----	-----------

Incorrectly Classified Instances	18	18.9474 %
----------------------------------	----	-----------

Kappa statistic	0.5723
-----------------	--------

Mean absolute error	0.187
---------------------	-------

Root mean squared error	0.4272
-------------------------	--------

Relative absolute error	50.5072 %
Root relative squared error	99.6065 %
Total Number of Instances	95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC	
Area									Class
0.913	0.222	0.568	0.913	0.700	0.607	0.918	0.696		ACL
0.778	0.087	0.966	0.778	0.862	0.607	0.935	0.971		nonACL
Weighted Avg.	0.811	0.120	0.869	0.811	0.822	0.607	0.931	0.904	

=== Confusion Matrix ===

a b <-- classified as

21 2 | a = ACL



16 56 | b = nonACL

93. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 5 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	87	91.5789 %
--------------------------------	----	-----------

Incorrectly Classified Instances	8	8.4211 %
----------------------------------	---	----------

Kappa statistic	0.7705
-----------------	--------

Mean absolute error	0.1218
---------------------	--------

Root mean squared error	0.2521
-------------------------	--------

Relative absolute error	32.8819 %
-------------------------	-----------

Root relative squared error	58.7836 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.826	0.056	0.826	0.826	0.826	0.771	0.917	0.878	ACL
	0.944	0.174	0.944	0.944	0.944	0.771	0.917	0.950	nonACL
Weighted Avg.	0.916	0.145	0.916	0.916	0.916	0.771	0.917	0.932	

==== Confusion Matrix ====

a b <-- classified as

19 4 | a = ACL

4 68 | b = nonACL

94. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 6 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	82	86.3158 %
--------------------------------	----	-----------

Incorrectly Classified Instances	13	13.6842 %
----------------------------------	----	-----------

Kappa statistic	0.5546
-----------------	--------

Mean absolute error	0.1511
---------------------	--------

Root mean squared error	0.295
-------------------------	-------

Relative absolute error	40.8036 %
-------------------------	-----------

Root relative squared error	68.7975 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.478	0.014	0.917	0.478	0.629	0.599	0.912	0.851
								ACL
	0.986	0.522	0.855	0.986	0.916	0.599	0.912	0.949
								nonACL
Weighted Avg.	0.863	0.399	0.870	0.863	0.847	0.599	0.912	0.925

==== Confusion Matrix ====

a b <-- classified as

11 12 | a = ACL

1 71 | b = nonACL

95. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 7 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	83	87.3684 %
Incorrectly Classified Instances	12	12.6316 %
Kappa statistic	0.6096	
Mean absolute error	0.1469	
Root mean squared error	0.2964	
Relative absolute error	39.6719 %	
Root relative squared error	69.1186 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC	
Area									Class
0.565	0.028	0.867	0.565	0.684	0.631	0.895	0.832		ACL
0.972	0.435	0.875	0.972	0.921	0.631	0.895	0.941		nonACL

Weighted Avg. 0.874 0.336 0.873 0.874 0.864 0.631 0.895 0.914

==== Confusion Matrix ====

a b <-- classified as

13 10 | a = ACL

2 70 | b = nonACL

96. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 8 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	83	87.3684 %
Incorrectly Classified Instances	12	12.6316 %
Kappa statistic	0.6096	

Mean absolute error	0.1553
Root mean squared error	0.3062
Relative absolute error	41.9353 %
Root relative squared error	71.3935 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.565	0.028	0.867	0.565	0.684	0.631	0.887	0.818
								ACL
	0.972	0.435	0.875	0.972	0.921	0.631	0.887	0.938
								nonACL
Weighted Avg.	0.874	0.336	0.873	0.874	0.864	0.631	0.887	0.909

==== Confusion Matrix ====

a b <-- classified as

13 10 | a = ACL

2 70 | b = nonACL

97. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 9 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.648
-----------------	-------

Mean absolute error	0.1427
---------------------	--------

Root mean squared error	0.2878
-------------------------	--------

Relative absolute error	38.5402 %
-------------------------	-----------



Root relative squared error            67.1129 %

Total Number of Instances            95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.609	0.028	0.875	0.609	0.718	0.665	0.912	0.867
ACL								
	0.972	0.391	0.886	0.972	0.927	0.665	0.912	0.949
nonACL								
Weighted Avg.	0.884	0.303	0.883	0.884	0.877	0.665	0.912	0.929

=== Confusion Matrix ===

a b <-- classified as

14 9 | a = ACL

2 70 | b = nonACL

98. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 10 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.636
-----------------	-------

Mean absolute error	0.149
---------------------	-------

Root mean squared error	0.2971
-------------------------	--------

Relative absolute error	40.2377 %
-------------------------	-----------

Root relative squared error	69.2864 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.565	0.014	0.929	0.565	0.703	0.666	0.910	0.854
								ACL
	0.986	0.435	0.877	0.986	0.928	0.666	0.910	0.948
								nonACL
Weighted Avg.	0.884	0.333	0.889	0.884	0.874	0.666	0.910	0.925

==== Confusion Matrix ====

a b <-- classified as

13 10 | a = ACL

1 71 | b = nonACL

99. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 20 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

### === Summary ===

Correctly Classified Instances	82	86.3158 %
--------------------------------	----	-----------

Incorrectly Classified Instances	13	13.6842 %
----------------------------------	----	-----------

Kappa statistic	0.5383
-----------------	--------

Mean absolute error	0.1281
---------------------	--------

Root mean squared error	0.2956
-------------------------	--------

Relative absolute error	34.5794 %
-------------------------	-----------

Root relative squared error	68.9198 %
-----------------------------	-----------

Total Number of Instances 95

### === Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								

0.435	0.000	1.000	0.435	0.606	0.607	0.919	0.898	ACL
-------	-------	-------	-------	-------	-------	-------	-------	-----

1.000	0.565	0.847	1.000	0.917	0.607	0.919	0.951	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.863	0.428	0.884	0.863	0.842	0.607	0.919	0.938
---------------	-------	-------	-------	-------	-------	-------	-------	-------

=== Confusion Matrix ===

a b <-- classified as

10 13 | a = ACL

0 72 | b = nonACL

100. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 50 features selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	84	88.4211 %
--------------------------------	----	-----------

Incorrectly Classified Instances	11	11.5789 %
----------------------------------	----	-----------

Kappa statistic	0.636
-----------------	-------

Mean absolute error	0.1406
---------------------	--------

Root mean squared error	0.2752
-------------------------	--------

Relative absolute error	37.9744 %
-------------------------	-----------

Root relative squared error	64.172 %
-----------------------------	----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.565	0.014	0.929	0.565	0.703	0.666	0.943	0.872
								ACL
	0.986	0.435	0.877	0.986	0.928	0.666	0.943	0.969
								nonACL
Weighted Avg.	0.884	0.333	0.889	0.884	0.874	0.666	0.943	0.946

==== Confusion Matrix ====

a b <-- classified as

13 10 | a = ACL

1 71 | b = nonACL

101. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 100 features  
selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	81	85.2632 %
--------------------------------	----	-----------

Incorrectly Classified Instances	14	14.7368 %
----------------------------------	----	-----------

Kappa statistic	0.5445
-----------------	--------

Mean absolute error	0.1448
---------------------	--------

Root mean squared error	0.2886
-------------------------	--------

Relative absolute error	39.106 %
-------------------------	----------

Root relative squared error	67.2856 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area	Class							



0.522	0.042	0.800	0.522	0.632	0.564	0.931	0.838	ACL
-------	-------	-------	-------	-------	-------	-------	-------	-----

0.958	0.478	0.863	0.958	0.908	0.564	0.931	0.966	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.853	0.373	0.847	0.853	0.841	0.564	0.931	0.935
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

12 11 | a = ACL

3 69 | b = nonACL

102. K-nearest neighbors (KNN) with feature selection ReliefF-set to false (RF-f) 200 features  
selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	86	90.5263 %
Incorrectly Classified Instances	9	9.4737 %
Kappa statistic	0.712	
Mean absolute error	0.1553	
Root mean squared error	0.2879	
Relative absolute error	41.9353 %	
Root relative squared error	67.1367 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC	
Area									Class
0.652	0.014	0.938	0.652	0.769	0.731	0.908	0.841		ACL
0.986	0.348	0.899	0.986	0.940	0.731	0.908	0.946		nonACL

Weighted Avg. 0.905 0.267 0.908 0.905 0.899 0.731 0.908 0.921

==== Confusion Matrix ====

a b <-- classified as

15 8 | a = ACL

1 71 | b = nonACL

103. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 5 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7212
-----------------	--------

Mean absolute error	0.0878
Root mean squared error	0.2564
Relative absolute error	23.7022 %
Root relative squared error	59.7788 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.696	0.028	0.889	0.696	0.780	0.730	0.978	0.940
ACL								
	0.972	0.304	0.909	0.972	0.940	0.730	0.978	0.993
nonACL								
Weighted Avg.	0.905	0.237	0.904	0.905	0.901	0.730	0.978	0.980

==== Confusion Matrix ====

a b <-- classified as

16 7 | a = ACL

2 70 | b = nonACL

104. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 6 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	90	94.7368 %
--------------------------------	----	-----------

Incorrectly Classified Instances	5	5.2632 %
----------------------------------	---	----------

Kappa statistic	0.8544
-----------------	--------

Mean absolute error	0.0635
---------------------	--------

Root mean squared error	0.1944
-------------------------	--------

Relative absolute error	17.1521 %
-------------------------	-----------

Root relative squared error            45.3304 %

Total Number of Instances            95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.870	0.028	0.909	0.870	0.889	0.855	0.992	0.975
ACL								
	0.972	0.130	0.959	0.972	0.966	0.855	0.992	0.997
nonACL								
Weighted Avg.	0.947	0.106	0.947	0.947	0.947	0.855	0.992	0.992

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

2 70 | b = nonACL

105. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 7 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	91	95.7895 %
--------------------------------	----	-----------

Incorrectly Classified Instances	4	4.2105 %
----------------------------------	---	----------

Kappa statistic	0.8853
-----------------	--------

Mean absolute error	0.0512
---------------------	--------

Root mean squared error	0.1853
-------------------------	--------

Relative absolute error	13.8147 %
-------------------------	-----------

Root relative squared error	43.2018 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.913	0.028	0.913	0.913	0.913	0.885	0.993	0.980
								ACL
	0.972	0.087	0.972	0.972	0.972	0.885	0.993	0.998
								nonACL
Weighted Avg.	0.958	0.073	0.958	0.958	0.958	0.885	0.993	0.993

==== Confusion Matrix ====

a b <-- classified as

21 2 | a = ACL

2 70 | b = nonACL

106. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 8 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====



### === Summary ===

Correctly Classified Instances	93	97.8947 %
--------------------------------	----	-----------

Incorrectly Classified Instances	2	2.1053 %
----------------------------------	---	----------

Kappa statistic	0.9409
-----------------	--------

Mean absolute error	0.0374
---------------------	--------

Root mean squared error	0.1522
-------------------------	--------

Relative absolute error                    10.0881 %

Root relative squared error	35.4856 %
-----------------------------	-----------

Total Number of Instances 95

### === Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								

0.913	0.000	1.000	0.913	0.955	0.943	0.981	0.972	ACL
-------	-------	-------	-------	-------	-------	-------	-------	-----

1.000	0.087	0.973	1.000	0.986	0.943	0.981	0.992	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.979	0.066	0.980	0.979	0.979	0.943	0.981	0.987
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

21 2 | a = ACL

0 72 | b = nonACL

107. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 9 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	92	96.8421 %
--------------------------------	----	-----------

Incorrectly Classified Instances	3	3.1579 %
----------------------------------	---	----------

Kappa statistic	0.9127
Mean absolute error	0.0439
Root mean squared error	0.1637
Relative absolute error	11.8426 %
Root relative squared error	38.1796 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.913	0.014	0.955	0.913	0.933	0.913	0.986	0.975
								ACL
	0.986	0.087	0.973	0.986	0.979	0.913	0.986	0.995
								nonACL
Weighted Avg.	0.968	0.069	0.968	0.968	0.968	0.913	0.986	0.990

==== Confusion Matrix ====

a b <-- classified as

21 2 | a = ACL

1 71 | b = nonACL

108. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 10 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	89	93.6842 %
--------------------------------	----	-----------

Incorrectly Classified Instances	6	6.3158 %
----------------------------------	---	----------

Kappa statistic	0.8227
-----------------	--------

Mean absolute error	0.0606
---------------------	--------

Root mean squared error	0.199
-------------------------	-------

Relative absolute error	16.3657 %
-------------------------	-----------

Root relative squared error      46.4061 %

Total Number of Instances      95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC	
Area									Class
0.826	0.028	0.905	0.826	0.864	0.824	0.984	0.962		ACL
0.972	0.174	0.946	0.972	0.959	0.824	0.984	0.995		nonACL
Weighted Avg.	0.937	0.139	0.936	0.937	0.936	0.824	0.984	0.987	

=== Confusion Matrix ===

a b <-- classified as

19 4 | a = ACL

2 70 | b = nonACL

109. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 20 features selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	89	93.6842 %
--------------------------------	----	-----------

Incorrectly Classified Instances	6	6.3158 %
----------------------------------	---	----------

Kappa statistic	0.8375
-----------------	--------

Mean absolute error	0.068
---------------------	-------

Root mean squared error	0.2327
-------------------------	--------

Relative absolute error	18.3567 %
-------------------------	-----------

Root relative squared error	54.2645 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.957	0.069	0.815	0.957	0.880	0.842	0.979	0.959 ACL
	0.931	0.043	0.985	0.931	0.957	0.842	0.979	0.992 nonACL
Weighted Avg.	0.937	0.050	0.944	0.937	0.938	0.842	0.979	0.984

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

5 67 | b = nonACL

110. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 50 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

### === Summary ===

Correctly Classified Instances	75	78.9474 %
--------------------------------	----	-----------

Incorrectly Classified Instances	20	21.0526 %
----------------------------------	----	-----------

Kappa statistic	0.5003
-----------------	--------

Mean absolute error	0.2073
---------------------	--------

Root mean squared error	0.4483
-------------------------	--------

Relative absolute error	55.9801 %
-------------------------	-----------

Root relative squared error	104.5247 %
-----------------------------	------------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

Area	Class	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
------	-------	---------	---------	-----------	--------	-----------	-----	----------	-----

0.783 0.208 0.545 0.783 0.643 0.517 0.926 0.857 ACL



0.792	0.217	0.919	0.792	0.851	0.517	0.912	0.962	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.789	0.215	0.829	0.789	0.800	0.517	0.916	0.936
---------------	-------	-------	-------	-------	-------	-------	-------	-------

==== Confusion Matrix ====

a b <-- classified as

18 5 | a = ACL

15 57 | b = nonACL

111. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 100 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	86	90.5263 %
--------------------------------	----	-----------

Incorrectly Classified Instances	9	9.4737 %
----------------------------------	---	----------

Kappa statistic	0.7661
-----------------	--------

Mean absolute error	0.0865
---------------------	--------

Root mean squared error	0.2852
-------------------------	--------

Relative absolute error	23.3518 %
-------------------------	-----------

Root relative squared error	66.4961 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.957	0.111	0.733	0.957	0.830	0.779	0.975	0.954
ACL								
	0.889	0.043	0.985	0.889	0.934	0.779	0.966	0.980
nonACL								
Weighted Avg.	0.905	0.060	0.924	0.905	0.909	0.779	0.968	0.974

==== Confusion Matrix ====

a b <-- classified as

22 1 | a = ACL

112. NaiveBayes (NB) with feature selection ReliefF-W-set to true (RFW-t) 200 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	83	87.3684 %
--------------------------------	----	-----------

Incorrectly Classified Instances	12	12.6316 %
----------------------------------	----	-----------

Kappa statistic	0.6839
-----------------	--------

Mean absolute error	0.1254
---------------------	--------

Root mean squared error	0.3519
-------------------------	--------

Relative absolute error	33.8548 %
-------------------------	-----------

Root relative squared error            82.0553 %

Total Number of Instances            95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.870	0.125	0.690	0.870	0.769	0.693	0.932	0.752
ACL								
	0.875	0.130	0.955	0.875	0.913	0.693	0.943	0.973
nonACL								
Weighted Avg.	0.874	0.129	0.890	0.874	0.878	0.693	0.940	0.920

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

9 63 | b = nonACL

113. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 5 features  
selected

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	90	94.7368 %
--------------------------------	----	-----------

Incorrectly Classified Instances	5	5.2632 %
----------------------------------	---	----------

Kappa statistic	0.8451
-----------------	--------

Mean absolute error	0.0924
---------------------	--------

Root mean squared error	0.2083
-------------------------	--------

Relative absolute error	24.9602 %
-------------------------	-----------

Root relative squared error	48.5732 %
-----------------------------	-----------

Total Number of Instances                      95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.783	0.000	1.000	0.783	0.878	0.855	0.961	0.952
								ACL
	1.000	0.217	0.935	1.000	0.966	0.855	0.961	0.976
								nonACL
Weighted Avg.	0.947	0.165	0.951	0.947	0.945	0.855	0.961	0.970

==== Confusion Matrix ====

a b <-- classified as

18 5 | a = ACL

0 72 | b = nonACL

114. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 6 features  
selected

Test mode: 10-fold cross-validation

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	91	95.7895 %
--------------------------------	----	-----------

Incorrectly Classified Instances	4	4.2105 %
----------------------------------	---	----------

Kappa statistic	0.878
-----------------	-------

Mean absolute error	0.0945
---------------------	--------

Root mean squared error	0.2073
-------------------------	--------

Relative absolute error	25.526 %
-------------------------	----------

Root relative squared error	48.3446 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.826	0.000	1.000	0.826	0.905	0.885	0.962	0.953
ACL								
	1.000	0.174	0.947	1.000	0.973	0.885	0.962	0.976
nonACL								
Weighted Avg.	0.958	0.132	0.960	0.958	0.956	0.885	0.962	0.971



==== Confusion Matrix ====

a b <-- classified as

19 4 | a = ACL

115. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 7 features  
selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	92	96.8421 %
--------------------------------	----	-----------

Incorrectly Classified Instances	3	3.1579 %
----------------------------------	---	----------

Kappa statistic	0.91
-----------------	------

Mean absolute error	0.0924
---------------------	--------

Root mean squared error	0.1959
Relative absolute error	24.9602 %
Root relative squared error	45.6855 %
Total Number of Instances	95

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.870	0.000	1.000	0.870	0.930	0.914	0.965	0.963
								ACL
	1.000	0.130	0.960	1.000	0.980	0.914	0.965	0.977
								nonACL
Weighted Avg.	0.968	0.099	0.970	0.968	0.968	0.914	0.965	0.974

==== Confusion Matrix ====

a b <-- classified as

20 3 | a = ACL

0 72 | b = nonACL

116. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 8 features  
selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	90	94.7368 %
--------------------------------	----	-----------

Incorrectly Classified Instances	5	5.2632 %
----------------------------------	---	----------

Kappa statistic	0.8499
-----------------	--------

Mean absolute error	0.0841
---------------------	--------

Root mean squared error	0.2042
-------------------------	--------

Relative absolute error	22.6969 %
-------------------------	-----------

Root relative squared error            47.6078 %

Total Number of Instances            95

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.826	0.014	0.950	0.826	0.884	0.853	0.960	0.940
ACL								
	0.986	0.174	0.947	0.986	0.966	0.853	0.960	0.976
nonACL								
Weighted Avg.	0.947	0.135	0.947	0.947	0.946	0.853	0.960	0.967

=== Confusion Matrix ===

a b <-- classified as

19 4 | a = ACL

1 71 | b = nonACL

117. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 9 features  
selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	91	95.7895 %
--------------------------------	----	-----------

Incorrectly Classified Instances	4	4.2105 %
----------------------------------	---	----------

Kappa statistic	0.8818
-----------------	--------

Mean absolute error	0.0903
---------------------	--------

Root mean squared error	0.2113
-------------------------	--------

Relative absolute error	24.3944 %
-------------------------	-----------

Root relative squared error	49.2633 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area								
Class								
	0.870	0.014	0.952	0.870	0.909	0.883	0.958	0.934
ACL								
	0.986	0.130	0.959	0.986	0.973	0.883	0.958	0.976
nonACL								
Weighted Avg.	0.958	0.102	0.958	0.958	0.957	0.883	0.958	0.966

=== Confusion Matrix ===

a b <-- classified as

20 3 | a = ACL

1 71 | b = nonACL

118. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 10 features selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====

==== Summary ====

Correctly Classified Instances	90	94.7368 %
--------------------------------	----	-----------

Incorrectly Classified Instances	5	5.2632 %
----------------------------------	---	----------

Kappa statistic	0.8499
-----------------	--------

Mean absolute error	0.0903
---------------------	--------

Root mean squared error	0.2132
-------------------------	--------

Relative absolute error	24.3944 %
-------------------------	-----------

Root relative squared error	49.7216 %
-----------------------------	-----------

Total Number of Instances	95
---------------------------	----

==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.826	0.014	0.950	0.826	0.884	0.853	0.959	0.935
								ACL
	0.986	0.174	0.947	0.986	0.966	0.853	0.959	0.976
								nonACL
Weighted Avg.	0.947	0.135	0.947	0.947	0.946	0.853	0.959	0.966

==== Confusion Matrix ====

a b <-- classified as

19 4 | a = ACL

1 71 | b = nonACL

119. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 20 features

selected

Time taken to build model: 0 seconds

==== Stratified cross-validation ====



==== Summary ====

Correctly Classified Instances	87	91.5789 %
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Incorrectly Classified Instances	8	8.4211 %
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Kappa statistic	0.7482
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Mean absolute error	0.126
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Root mean squared error	0.2635
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Relative absolute error	34.0135 %
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Root relative squared error	61.4338 %
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Total Number of Instances	95
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==== Detailed Accuracy By Class ====

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.696	0.014	0.941	0.696	0.800	0.762	0.944	0.860	ACL

0.986	0.304	0.910	0.986	0.947	0.762	0.944	0.971	nonACL
-------	-------	-------	-------	-------	-------	-------	-------	--------

Weighted Avg.	0.916	0.234	0.918	0.916	0.911	0.762	0.944	0.944
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=== Confusion Matrix ===

a b <-- classified as

16 7 | a = ACL

1 71 | b = nonACL

120. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 50 features  
selected

=== Classifier model (full training set) ===

IB1 instance-based classifier

using 5 nearest neighbour(s) for classification

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances	87	91.5789 %
--------------------------------	----	-----------

Incorrectly Classified Instances	8	8.4211 %
----------------------------------	---	----------

Kappa statistic	0.7397
-----------------	--------

Mean absolute error	0.1176
---------------------	--------

Root mean squared error	0.2295
-------------------------	--------

Relative absolute error	31.7501 %
-------------------------	-----------

Root relative squared error	53.5228 %
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Total Number of Instances	95
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=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC
Area Class								
	0.652	0.000	1.000	0.652	0.789	0.766	0.989	0.956
	1.000	0.348	0.900	1.000	0.947	0.766	0.989	0.995
Weighted Avg.	0.916	0.264	0.924	0.916	0.909	0.766	0.989	0.986

==== Confusion Matrix ====

a b <-- classified as

15 8 | a = ACL

0 72 | b = nonACL

121. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 100 features selected

Time taken to build model: 0 seconds



0.783	0.056	0.818	0.783	0.800	0.738	0.940	0.865	ACL
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0.944	0.217	0.932	0.944	0.938	0.738	0.940	0.968	nonACL
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Weighted Avg.	0.905	0.178	0.904	0.905	0.905	0.738	0.940	0.943
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=== Confusion Matrix ===

a b <-- classified as

18 5 | a = ACL

4 68 | b = nonACL

122. K-nearest neighbors (KNN) with feature selection ReliefF-W-set to true (RFW-t) 200 features  
selected

**Time taken to build model: 0 seconds**

**=== Stratified cross-validation ===**

**=== Summary ===**

Correctly Classified Instances	85	89.4737 %
Incorrectly Classified Instances	10	10.5263 %
Kappa statistic	0.7044	
Mean absolute error	0.1469	
Root mean squared error	0.276	
Relative absolute error	39.6719 %	
Root relative squared error	64.3609 %	
Total Number of Instances	95	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0.739	0.056	0.810	0.739	0.773	0.706	0.927	0.821	ACL
0.944	0.261	0.919	0.944	0.932	0.706	0.927	0.963	nonACL
Weighted Avg.	0.895	0.211	0.892	0.895	0.893	0.706	0.927	0.929

=== Confusion Matrix ===

a b <-- classified as

17 6 | a = ACL

4 68 | b = nonACL