2016 before adding features:

1)Bayesnet with split:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 39 63.9344 %

Incorrectly Classified Instances 22 36.0656 %

Kappa statistic 0.4641

Mean absolute error 0.2344

Root mean squared error 0.4629

Relative absolute error 53.8767 %

Root relative squared error 98.9893 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.933 0.196 0.609 0.933 0.737 0.655 0.939 0.832 '(-inf-3.933333]'

0.417 0.216 0.556 0.417 0.476 0.215 0.716 0.562 '(3.933333-6.966667]'

0.682 0.128 0.750 0.682 0.714 0.566 0.896 0.856 '(6.966667-inf)'

Weighted Avg. 0.639 0.179 0.639 0.639 0.626 0.450 0.836 0.734

=== Confusion Matrix ===

a b c <-- classified as

14 1 0 | a = '(-inf-3.933333]'

9 10 5 | b = '(3.933333-6.966667]'

0 7 15 | c = '(6.966667-inf)'

2)NaiveBayes with split:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 39 63.9344 %

Incorrectly Classified Instances 22 36.0656 %

Kappa statistic 0.4641

Mean absolute error 0.2338

Root mean squared error 0.4601

Relative absolute error 53.7462 %

Root relative squared error 98.3822 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.933 0.196 0.609 0.933 0.737 0.655 0.939 0.832 '(-inf-3.933333]'

0.417 0.216 0.556 0.417 0.476 0.215 0.715 0.555 '(3.933333-6.966667]'

0.682 0.128 0.750 0.682 0.714 0.566 0.899 0.859 '(6.966667-inf)'

Weighted Avg. 0.639 0.179 0.639 0.639 0.626 0.450 0.836 0.733

=== Confusion Matrix ===

a b c <-- classified as

14 1 0 | a = '(-inf-3.933333]'

9 10 5 | b = '(3.933333-6.966667]'

1. 7 15 | c = '(6.966667-inf)'

j48 with 10 fold cross validationt:

Time taken to build model: 0 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 114 64.0449 %

Incorrectly Classified Instances 64 35.9551 %

Kappa statistic 0.4511

Mean absolute error 0.2831

Root mean squared error 0.3907

Relative absolute error 65.2168 %

Root relative squared error 83.8707 %

Total Number of Instances 178

=== Detailed Accuracy By Class ===

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

0.732 0.124 0.638 0.732 0.682 0.580 0.821 0.669 '(-inf-3.933333]'

0.710 0.404 0.527 0.710 0.605 0.299 0.641 0.450 '(3.933333-6.966667]'

0.515 0.027 0.921 0.515 0.660 0.578 0.830 0.727 '(6.966667-inf)'

Weighted Avg. 0.640 0.195 0.703 0.640 0.644 0.470 0.755 0.606

=== Confusion Matrix ===

a b c <-- classified as

30 11 0 | a = '(-inf-3.933333]'

17 49 3 | b = '(3.933333-6.966667]'

0 33 35 | c = '(6.966667-inf)'

jRip with folds:

Time taken to build model: 0.03 seconds

=== Stratified cross-validation ===

=== Summary ===

Correctly Classified Instances 108 60.6742 %

Incorrectly Classified Instances 70 39.3258 %

Kappa statistic 0.3993

Mean absolute error 0.3007

Root mean squared error 0.4105

Relative absolute error 69.265 %

Root relative squared error 88.1163 %

Total Number of Instances 178

=== Detailed Accuracy By Class ===

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

0.732 0.117 0.652 0.732 0.690 0.591 0.870 0.739 '(-inf-3.933333]'

0.580 0.376 0.494 0.580 0.533 0.199 0.636 0.457 '(3.933333-6.966667]'

0.559 0.118 0.745 0.559 0.639 0.474 0.812 0.694 '(6.966667-inf)'

Weighted Avg. 0.607 0.218 0.626 0.607 0.610 0.394 0.757 0.612

=== Confusion Matrix ===

a b c <-- classified as

30 11 0 | a = '(-inf-3.933333]'

16 40 13 | b = '(3.933333-6.966667]'

0 30 38 | c = '(6.966667-inf)'

**2015**

1)BayesNet:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0.01 seconds

=== Summary ===

Correctly Classified Instances 46 75.4098 %

Incorrectly Classified Instances 15 24.5902 %

Kappa statistic 0.6315

Mean absolute error 0.1636

Root mean squared error 0.3727

Relative absolute error 36.7749 %

Root relative squared error 77.4529 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.900 0.098 0.818 0.900 0.857 0.784 0.959 0.910 '(-inf-4]'

0.632 0.190 0.600 0.632 0.615 0.435 0.821 0.666 '(4-7]'

0.727 0.077 0.842 0.727 0.780 0.674 0.923 0.890 '(7-inf)'

Weighted Avg. 0.754 0.119 0.759 0.754 0.754 0.636 0.903 0.827

=== Confusion Matrix ===

a b c <-- classified as

18 2 0 | a = '(-inf-4]'

4 12 3 | b = '(4-7]'

1. 6 16 | c = '(7-inf)'

2)Naïve Bayes:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 46 75.4098 %

Incorrectly Classified Instances 15 24.5902 %

Kappa statistic 0.6315

Mean absolute error 0.1636

Root mean squared error 0.3703

Relative absolute error 36.7608 %

Root relative squared error 76.9584 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.900 0.098 0.818 0.900 0.857 0.784 0.959 0.910 '(-inf-4]'

0.632 0.190 0.600 0.632 0.615 0.435 0.818 0.626 '(4-7]'

0.727 0.077 0.842 0.727 0.780 0.674 0.924 0.889 '(7-inf)'

Weighted Avg. 0.754 0.119 0.759 0.754 0.754 0.636 0.902 0.814

=== Confusion Matrix ===

a b c <-- classified as

18 2 0 | a = '(-inf-4]'

4 12 3 | b = '(4-7]'

0 6 16 | c = '(7-inf)'

3)JRip:

Time taken to build model: 0.02 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 39 63.9344 %

Incorrectly Classified Instances 22 36.0656 %

Kappa statistic 0.4589

Mean absolute error 0.3055

Root mean squared error 0.4105

Relative absolute error 68.6637 %

Root relative squared error 85.3121 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.650 0.146 0.684 0.650 0.667 0.511 0.841 0.620 '(-inf-4]'

0.474 0.286 0.429 0.474 0.450 0.183 0.563 0.367 '(4-7]'

0.773 0.103 0.810 0.773 0.791 0.677 0.890 0.745 '(7-inf)'

Weighted Avg. 0.639 0.174 0.650 0.639 0.644 0.469 0.772 0.586

=== Confusion Matrix ===

a b c <-- classified as

13 7 0 | a = '(-inf-4]'

6 9 4 | b = '(4-7]'

1. 5 17 | c = '(7-inf)'

4)J48:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 43 70.4918 %

Incorrectly Classified Instances 18 29.5082 %

Kappa statistic 0.5622

Mean absolute error 0.2503

Root mean squared error 0.3698

Relative absolute error 56.2404 %

Root relative squared error 76.8452 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.850 0.098 0.810 0.850 0.829 0.743 0.866 0.799 '(-inf-4]'

0.789 0.333 0.517 0.789 0.625 0.423 0.747 0.487 '(4-7]'

0.500 0.000 1.000 0.500 0.667 0.624 0.895 0.791 '(7-inf)'

Weighted Avg. 0.705 0.136 0.787 0.705 0.707 0.601 0.839 0.699

=== Confusion Matrix ===

a b c <-- classified as

17 3 0 | a = '(-inf-4]'

4 15 0 | b = '(4-7]'

0 11 11 | c = '(7-inf)'

***2014:***

1)Bayesnet:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 42 68.8525 %

Incorrectly Classified Instances 19 31.1475 %

Kappa statistic 0.5327

Mean absolute error 0.2118

Root mean squared error 0.442

Relative absolute error 47.5108 %

Root relative squared error 92.2788 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.762 0.075 0.842 0.762 0.800 0.705 0.936 0.839 '(-inf-4.166667]'

0.571 0.250 0.545 0.571 0.558 0.318 0.731 0.507 '(4.166667-7.033333]'

0.737 0.143 0.700 0.737 0.718 0.586 0.898 0.797 '(7.033333-inf)'

Weighted Avg. 0.689 0.156 0.696 0.689 0.691 0.535 0.854 0.712

=== Confusion Matrix ===

a b c <-- classified as

16 5 0 | a = '(-inf-4.166667]'

3 12 6 | b = '(4.166667-7.033333]'

1. 5 14 | c = '(7.033333-inf)'

2)NaiveBayes:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 42 68.8525 %

Incorrectly Classified Instances 19 31.1475 %

Kappa statistic 0.5327

Mean absolute error 0.2109

Root mean squared error 0.4398

Relative absolute error 47.3274 %

Root relative squared error 91.8263 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.762 0.075 0.842 0.762 0.800 0.705 0.936 0.839 '(-inf-4.166667]'

0.571 0.250 0.545 0.571 0.558 0.318 0.735 0.515 '(4.166667-7.033333]'

0.737 0.143 0.700 0.737 0.718 0.586 0.900 0.801 '(7.033333-inf)'

Weighted Avg. 0.689 0.156 0.696 0.689 0.691 0.535 0.855 0.716

=== Confusion Matrix ===

a b c <-- classified as

16 5 0 | a = '(-inf-4.166667]'

3 12 6 | b = '(4.166667-7.033333]'

1. 5 14 | c = '(7.033333-inf)'

3)j48:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 43 70.4918 %

Incorrectly Classified Instances 18 29.5082 %

Kappa statistic 0.5573

Mean absolute error 0.2629

Root mean squared error 0.377

Relative absolute error 58.9855 %

Root relative squared error 78.7097 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.762 0.050 0.889 0.762 0.821 0.742 0.915 0.799 '(-inf-4.166667]'

0.619 0.250 0.565 0.619 0.591 0.362 0.725 0.509 '(4.166667-7.033333]'

0.737 0.143 0.700 0.737 0.718 0.586 0.853 0.632 '(7.033333-inf)'

Weighted Avg. 0.705 0.148 0.719 0.705 0.710 0.562 0.831 0.647

=== Confusion Matrix ===

a b c <-- classified as

16 5 0 | a = '(-inf-4.166667]'

2 13 6 | b = '(4.166667-7.033333]'

0 5 14 | c = '(7.033333-inf)'

4)JRip:

Time taken to build model: 0.02 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 38 62.2951 %

Incorrectly Classified Instances 23 37.7049 %

Kappa statistic 0.4352

Mean absolute error 0.2925

Root mean squared error 0.4088

Relative absolute error 65.6133 %

Root relative squared error 85.3587 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.762 0.050 0.889 0.762 0.821 0.742 0.896 0.791 '(-inf-4.166667]'

0.476 0.275 0.476 0.476 0.476 0.201 0.671 0.449 '(4.166667-7.033333]'

0.632 0.238 0.545 0.632 0.585 0.379 0.776 0.507 '(7.033333-inf)'

Weighted Avg. 0.623 0.186 0.640 0.623 0.629 0.443 0.781 0.585

=== Confusion Matrix ===

a b c <-- classified as

16 4 1 | a = '(-inf-4.166667]'

2 10 9 | b = '(4.166667-7.033333]'

0 7 12 | c = '(7.033333-inf)'

***2013:***

1)BayesNet:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 45 73.7705 %

Incorrectly Classified Instances 16 26.2295 %

Kappa statistic 0.6065

Mean absolute error 0.1803

Root mean squared error 0.4109

Relative absolute error 40.57 %

Root relative squared error 84.6617 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.850 0.024 0.944 0.850 0.895 0.850 0.977 0.965 '(-inf-4]'

0.650 0.220 0.591 0.650 0.619 0.421 0.817 0.671 '(4-7]'

0.714 0.150 0.714 0.714 0.714 0.564 0.876 0.746 '(7-inf)'

Weighted Avg. 0.738 0.132 0.749 0.738 0.742 0.611 0.890 0.793

=== Confusion Matrix ===

a b c <-- classified as

17 3 0 | a = '(-inf-4]'

1 13 6 | b = '(4-7]'

0 6 15 | c = '(7-inf)'

2)NaiveBayes:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 44 72.1311 %

Incorrectly Classified Instances 17 27.8689 %

Kappa statistic 0.5819

Mean absolute error 0.1797

Root mean squared error 0.4037

Relative absolute error 40.4253 %

Root relative squared error 83.1686 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.850 0.049 0.895 0.850 0.872 0.812 0.976 0.964 '(-inf-4]'

0.600 0.220 0.571 0.600 0.585 0.376 0.820 0.695 '(4-7]'

0.714 0.150 0.714 0.714 0.714 0.564 0.890 0.791 '(7-inf)'

Weighted Avg. 0.721 0.140 0.727 0.721 0.724 0.584 0.895 0.816

=== Confusion Matrix ===

a b c <-- classified as

17 3 0 | a = '(-inf-4]'

2 12 6 | b = '(4-7]'

1. 6 15 | c = '(7-inf)'

3)jRip:

Time taken to build model: 0.01 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 45 73.7705 %

Incorrectly Classified Instances 16 26.2295 %

Kappa statistic 0.6068

Mean absolute error 0.2405

Root mean squared error 0.3696

Relative absolute error 54.108 %

Root relative squared error 76.1428 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.800 0.000 1.000 0.800 0.889 0.854 0.946 0.895 '(-inf-4]'

0.750 0.268 0.577 0.750 0.652 0.457 0.790 0.544 '(4-7]'

0.667 0.125 0.737 0.667 0.700 0.556 0.838 0.647 '(7-inf)'

Weighted Avg. 0.738 0.131 0.771 0.738 0.746 0.621 0.857 0.694

=== Confusion Matrix ===

a b c <-- classified as

16 4 0 | a = '(-inf-4]'

0 15 5 | b = '(4-7]'

0 7 14 | c = '(7-inf)'

4)j48:

Time taken to build model: 0 seconds

=== Evaluation on test split ===

Time taken to test model on test split: 0 seconds

=== Summary ===

Correctly Classified Instances 45 73.7705 %

Incorrectly Classified Instances 16 26.2295 %

Kappa statistic 0.6065

Mean absolute error 0.24

Root mean squared error 0.3694

Relative absolute error 54.003 %

Root relative squared error 76.1031 %

Total Number of Instances 61

=== Detailed Accuracy By Class ===

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

0.800 0.000 1.000 0.800 0.889 0.854 0.951 0.900 '(-inf-4]'

0.700 0.244 0.583 0.700 0.636 0.438 0.787 0.542 '(4-7]'

0.714 0.150 0.714 0.714 0.714 0.564 0.839 0.644 '(7-inf)'

Weighted Avg. 0.738 0.132 0.765 0.738 0.746 0.618 0.859 0.694

=== Confusion Matrix ===

a b c <-- classified as

16 4 0 | a = '(-inf-4]'

0 14 6 | b = '(4-7]'

0 6 15 | c = '(7-inf)'