

- **Top 18 Models with 'Sample\_Train.arff' Data.**
  - **Criterion for 18 Models: Prediction Rate over 78.50%.**
  - **Among all possible models by using WEKA.**
  - **Model number is allocated in a sequence by WEKA Classifier.**

Ranking	Number/Model Name	Prediction Rate
1	16. AttributeSelectedClassifier	79.2073%
	40. J48	79.2073%
3	41. LMT	79.0989%
4	6. Mutilayer Perceptron	79.0704%
5	33. DecisionTable	78.9792%
6	36. PART	78.9165%
7	9. Simple Logistic	78.9050%
8	5. Logistic	78.8993%
9	23. MultiClassClassifier	78.8993%
10	17. Bagging	78.8081%
11	1. BayesNet	78.6370%
12	21. Interactive Classifier Optimizer	78.6313%
13	22. LogitBoost	78.6313%
14	2. NaiveBayes	78.6142%
15	4. NlaveBayes Updateable	78.6142%
16	44. REPTree	78.5800%
17	20. FilteredClassifier	78.5686%
18	39. HoeffdingTree	78.5344%

- **Result Summary for all possible models with 'Sample\_Train.arff' Data by using WEKA.**
  - **Total 44 Models are possible with 'Sample\_Train.arff' Data in WEKA.**

## 1. BayesNet

=== Summary ===

Correctly Classified Instances	13789	78.637 %
Incorrectly Classified Instances	3746	21.363 %
Kappa statistic	0.2948	
Mean absolute error	0.3077	
Root mean squared error	0.4009	
Relative absolute error	81.9026 %	
Root relative squared error	92.4999 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0.955	0.717	0.799	0.955	0.870	0.336	0.704	0.851	0

	0.283	0.045	0.676	0.283	0.399	0.336	0.704	0.521	1
Weighted Avg.	0.786	0.549	0.768	0.786	0.752	0.336	0.704	0.768	

=== Confusion Matrix ===

```

a      b  <-- classified as
12545  595 |    a = 0
3151  1244 |    b = 1

```

## 2. NaiveBayes

=== Summary ===

Correctly Classified Instances	13785	78.6142 %
Incorrectly Classified Instances	3750	21.3858 %
Kappa statistic	0.2886	
Mean absolute error	0.3152	
Root mean squared error	0.4017	
Relative absolute error	83.9049 %	
Root relative squared error	92.6912 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.958	0.727	0.798	0.958	0.870	0.333	0.697	0.846	0
	0.273	0.042	0.684	0.273	0.390	0.333	0.697	0.512	1
Weighted Avg.	0.786	0.555	0.769	0.786	0.750	0.333	0.697	0.763	

=== Confusion Matrix ===

```

a      b  <-- classified as
12584  556 |    a = 0
3194  1201 |    b = 1

```

## 3. NaiveBayes Multinomial Text

=== Summary ===

Correctly Classified Instances	13140	74.9358 %
Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.3757	
Root mean squared error	0.4334	
Relative absolute error	100	%
Root relative squared error	100	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0
	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

	a	b	<-- classified as
13140	0		a = 0
4395	0		b = 1

#### 4. NaiveBayes Updateable

=== Summary ===

Correctly Classified Instances	13785	78.6142 %
Incorrectly Classified Instances	3750	21.3858 %
Kappa statistic	0.2886	
Mean absolute error	0.3152	
Root mean squared error	0.4017	
Relative absolute error	83.9049 %	
Root relative squared error	92.6912 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.958	0.727	0.798	0.958	0.870	0.333	0.697	0.846	0
	0.273	0.042	0.684	0.273	0.390	0.333	0.697	0.512	1
Weighted Avg.	0.786	0.555	0.769	0.786	0.750	0.333	0.697	0.763	

=== Confusion Matrix ===

	a	b	<-- classified as
12584	556		a = 0
3194	1201		b = 1

#### 5. Logistic

=== Summary ===

Correctly Classified Instances	13835	78.8993 %
Incorrectly Classified Instances	3700	21.1007 %
Kappa statistic	0.2914	
Mean absolute error	0.3184	
Root mean squared error	0.3977	
Relative absolute error	84.7624 %	
Root relative squared error	91.7651 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.963	0.732	0.797	0.963	0.872	0.342	0.715	0.852	0
	0.268	0.037	0.710	0.268	0.389	0.342	0.715	0.533	1
Weighted Avg.	0.789	0.558	0.775	0.789	0.751	0.342	0.715	0.772	

=== Confusion Matrix ===

```

      a      b  <-- classified as
12659  481 |      a = 0
 3219 1176 |      b = 1

```

## 6. Multilayer Perceptron

=== Summary ===

Correctly Classified Instances	13865	79.0704 %
Incorrectly Classified Instances	3670	20.9296 %
Kappa statistic	0.3115	
Mean absolute error	0.3094	
Root mean squared error	0.3965	
Relative absolute error	82.3611 %	
Root relative squared error	91.4912 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.956	0.704	0.802	0.956	0.873	0.353	0.717	0.856	0
	0.296	0.044	0.693	0.296	0.415	0.353	0.717	0.535	1
Weighted Avg.	0.791	0.539	0.775	0.791	0.758	0.353	0.717	0.776	

=== Confusion Matrix ===

```

      a      b  <-- classified as
12565  575 |      a = 0
 3095 1300 |      b = 1

```

## 7. SGD

=== Summary ===

Correctly Classified Instances	13436	76.6239 %
Incorrectly Classified Instances	4099	23.3761 %
Kappa statistic	0.1944	
Mean absolute error	0.2338	
Root mean squared error	0.4835	

Relative absolute error	62.2273 %
Root relative squared error	111.5616 %
Total Number of Instances	17535

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.958	0.808	0.780	0.958	0.860	0.241	0.575	0.779	0
	0.192	0.042	0.606	0.192	0.291	0.241	0.575	0.319	1
Weighted Avg.	0.766	0.616	0.737	0.766	0.718	0.241	0.575	0.663	

=== Confusion Matrix ===

a	b	<-- classified as
12593	547	a = 0
3552	843	b = 1

## 8. SGD Text

=== Summary ===

Correctly Classified Instances	13140	74.9358 %
Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.2506	
Root mean squared error	0.5006	
Relative absolute error	66.7209 %	
Root relative squared error	115.5195 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0
	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

a	b	<-- classified as
13140	0	a = 0
4395	0	b = 1

## 9. Simple Logistic

=== Summary ===

Correctly Classified Instances	13836	78.905 %
Incorrectly Classified Instances	3699	21.095 %
Kappa statistic	0.2912	
Mean absolute error	0.3187	
Root mean squared error	0.3977	
Relative absolute error	84.8357 %	
Root relative squared error	91.773 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.964	0.733	0.797	0.964	0.873	0.342	0.715	0.852	0
	0.267	0.036	0.711	0.267	0.388	0.342	0.715	0.533	1
Weighted Avg.	0.789	0.558	0.776	0.789	0.751	0.342	0.715	0.772	

=== Confusion Matrix ===

a	b	<-- classified as
12662	478	a = 0
3221	1174	b = 1

## 10. SMO

=== Summary ===

Correctly Classified Instances	13436	76.6239 %
Incorrectly Classified Instances	4099	23.3761 %
Kappa statistic	0.1944	
Mean absolute error	0.2338	
Root mean squared error	0.4835	
Relative absolute error	62.2273 %	
Root relative squared error	111.5616 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.958	0.808	0.780	0.958	0.860	0.241	0.575	0.779	0
	0.192	0.042	0.606	0.192	0.291	0.241	0.575	0.319	1
Weighted Avg.	0.766	0.616	0.737	0.766	0.718	0.241	0.575	0.663	

=== Confusion Matrix ===

```

a      b    <-- classified as
12593  547 |    a = 0
3552   843 |    b = 1

```

## 11. VotedPerceptron

=== Summary ===

Correctly Classified Instances	13367	76.2304 %
Incorrectly Classified Instances	4168	23.7696 %
Kappa statistic	0.0779	
Mean absolute error	0.2377	
Root mean squared error	0.4875	
Relative absolute error	63.2746 %	
Root relative squared error	112.4962 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.999	0.946	0.760	0.999	0.863	0.195	0.527	0.760	0
	0.054	0.001	0.952	0.054	0.103	0.195	0.531	0.296	1
Weighted Avg.	0.762	0.709	0.808	0.762	0.672	0.195	0.528	0.643	

=== Confusion Matrix ===

```

a      b    <-- classified as
13128   12 |    a = 0
4156   239 |    b = 1

```

## 12. IBK

=== Summary ===

Correctly Classified Instances	13279	75.7285 %
Incorrectly Classified Instances	4256	24.2715 %
Kappa statistic	0.2422	
Mean absolute error	0.3066	
Root mean squared error	0.4684	
Relative absolute error	81.6207 %	
Root relative squared error	108.0787 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

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

	0.912	0.706	0.794	0.912	0.849	0.258	0.630	0.808	0
	0.294	0.088	0.528	0.294	0.378	0.258	0.630	0.418	1
Weighted Avg.	0.757	0.551	0.728	0.757	0.731	0.258	0.630	0.710	

=== Confusion Matrix ===

```

      a      b    <-- classified as
11985 1155 |      a = 0
 3101 1294 |      b = 1

```

### 13. KStar

=== Summary ===

Correctly Classified Instances	13680	78.0154 %
Incorrectly Classified Instances	3855	21.9846 %
Kappa statistic	0.2064	
Mean absolute error	0.32	
Root mean squared error	0.4008	
Relative absolute error	85.1851 %	
Root relative squared error	92.4807 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.985	0.833	0.780	0.985	0.870	0.295	0.718	0.862	0
	0.167	0.015	0.791	0.167	0.276	0.295	0.718	0.532	1
Weighted Avg.	0.780	0.628	0.782	0.780	0.721	0.295	0.718	0.779	

=== Confusion Matrix ===

```

      a      b    <-- classified as
12946 194 |      a = 0
 3661 734 |      b = 1

```

### 14. LWL

=== Summary ===

Correctly Classified Instances	13697	78.1123 %
Incorrectly Classified Instances	3838	21.8877 %
Kappa statistic	0.2809	
Mean absolute error	0.3372	
Root mean squared error	0.4095	
Relative absolute error	89.7724 %	



Root relative squared error	94.4913 %
Total Number of Instances	17535

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.949	0.722	0.797	0.949	0.867	0.318	0.665	0.826	0
	0.278	0.051	0.647	0.278	0.389	0.318	0.665	0.477	1
Weighted Avg.	0.781	0.554	0.760	0.781	0.747	0.318	0.665	0.739	

=== Confusion Matrix ===

a	b	<-- classified as
12474	666	a = 0
3172	1223	b = 1

## 15. AdaBoostM1

=== Summary ===

Correctly Classified Instances	13453	76.7208 %
Incorrectly Classified Instances	4082	23.2792 %
Kappa statistic	0.1749	
Mean absolute error	0.3279	
Root mean squared error	0.4098	
Relative absolute error	87.2829 %	
Root relative squared error	94.5652 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.970	0.838	0.776	0.970	0.862	0.234	0.687	0.844	0
	0.162	0.030	0.641	0.162	0.258	0.234	0.687	0.471	1
Weighted Avg.	0.767	0.636	0.742	0.767	0.711	0.234	0.687	0.750	

=== Confusion Matrix ===

a	b	<-- classified as
12743	397	a = 0
3685	710	b = 1

## 16. AttributeSelectedClassifier

=== Summary ===

Correctly Classified Instances	13889	79.2073 %
Incorrectly Classified Instances	3646	20.7927 %
Kappa statistic	0.3213	
Mean absolute error	0.3149	
Root mean squared error	0.3994	
Relative absolute error	83.8237 %	
Root relative squared error	92.1588 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.954	0.692	0.805	0.954	0.873	0.360	0.686	0.831	0
	0.308	0.046	0.691	0.308	0.426	0.360	0.686	0.507	1
Weighted Avg.	0.792	0.530	0.776	0.792	0.761	0.360	0.686	0.750	

=== Confusion Matrix ===

a	b	<-- classified as
12535	605	a = 0
3041	1354	b = 1

## 17. Bagging

=== Summary ===

Correctly Classified Instances	13819	78.8081 %
Incorrectly Classified Instances	3716	21.1919 %
Kappa statistic	0.3108	
Mean absolute error	0.3085	
Root mean squared error	0.3983	
Relative absolute error	82.1102 %	
Root relative squared error	91.8986 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.950	0.695	0.803	0.950	0.870	0.347	0.712	0.857	0
	0.305	0.050	0.670	0.305	0.419	0.347	0.712	0.532	1
Weighted Avg.	0.788	0.534	0.770	0.788	0.757	0.347	0.712	0.775	

=== Confusion Matrix ===

a	b	<-- classified as
---	---	-------------------

```

12480  660 |    a = 0
3056  1339 |    b = 1

```

## 18. ClassificationViaRegression

=== Summary ===

Correctly Classified Instances	13874	79.1218 %
Incorrectly Classified Instances	3661	20.8782 %
Kappa statistic	0.3021	
Mean absolute error	0.3116	
Root mean squared error	0.3952	
Relative absolute error	82.9385 %	
Root relative squared error	91.1945 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.963	0.722	0.799	0.963	0.874	0.352	0.724	0.864	0
	0.278	0.037	0.715	0.278	0.400	0.352	0.724	0.544	1
Weighted Avg.	0.791	0.551	0.778	0.791	0.755	0.352	0.724	0.784	

=== Confusion Matrix ===

```

      a      b  <-- classified as
12654  486 |    a = 0
3175  1220 |    b = 1

```

## 19. CVParameterSelection

=== Summary ===

Correctly Classified Instances	13140	74.9358 %
Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.3757	
Root mean squared error	0.4334	
Relative absolute error	100	%
Root relative squared error	100	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0

	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

```

      a      b  <-- classified as
13140    0 |    a = 0
 4395    0 |    b = 1

```

## 20. FilteredClassifier

=== Summary ===

Correctly Classified Instances	13777	78.5686 %
Incorrectly Classified Instances	3758	21.4314 %
Kappa statistic	0.2804	
Mean absolute error	0.3242	
Root mean squared error	0.4036	
Relative absolute error	86.3103 %	
Root relative squared error	93.1294 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.961	0.739	0.795	0.961	0.870	0.329	0.660	0.819	0
	0.261	0.039	0.692	0.261	0.379	0.329	0.660	0.486	1
Weighted Avg.	0.786	0.563	0.770	0.786	0.747	0.329	0.660	0.736	

=== Confusion Matrix ===

```

      a      b  <-- classified as
12629  511 |    a = 0
 3247 1148 |    b = 1

```

## 21. Interactive Classifier Optimizer

=== Summary ===

Correctly Classified Instances	13788	78.6313 %
Incorrectly Classified Instances	3747	21.3687 %
Kappa statistic	0.2934	
Mean absolute error	0.3159	
Root mean squared error	0.3987	
Relative absolute error	84.1029 %	
Root relative squared error	92.0067 %	

Total Number of Instances 17535

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.955	0.719	0.799	0.955	0.870	0.336	0.712	0.856	0
	0.281	0.045	0.678	0.281	0.397	0.336	0.712	0.524	1
Weighted Avg.	0.786	0.550	0.769	0.786	0.752	0.336	0.712	0.773	

=== Confusion Matrix ===

a	b	<-- classified as
12554	586	a = 0
3161	1234	b = 1

## 22. LogitBoost

=== Summary ===

Correctly Classified Instances	13788	78.6313 %
Incorrectly Classified Instances	3747	21.3687 %
Kappa statistic	0.2934	
Mean absolute error	0.3159	
Root mean squared error	0.3987	
Relative absolute error	84.1029 %	
Root relative squared error	92.0067 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.955	0.719	0.799	0.955	0.870	0.336	0.712	0.856	0
	0.281	0.045	0.678	0.281	0.397	0.336	0.712	0.524	1
Weighted Avg.	0.786	0.550	0.769	0.786	0.752	0.336	0.712	0.773	

=== Confusion Matrix ===

a	b	<-- classified as
12554	586	a = 0
3161	1234	b = 1

## 23. MultiClassClassifier

=== Summary ===

Correctly Classified Instances	13835	78.8993 %
Incorrectly Classified Instances	3700	21.1007 %
Kappa statistic	0.2914	
Mean absolute error	0.3184	
Root mean squared error	0.3977	
Relative absolute error	84.7624 %	
Root relative squared error	91.7651 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.963	0.732	0.797	0.963	0.872	0.342	0.715	0.852	0
	0.268	0.037	0.710	0.268	0.389	0.342	0.715	0.533	1
Weighted Avg.	0.789	0.558	0.775	0.789	0.751	0.342	0.715	0.772	

=== Confusion Matrix ===

a	b	<-- classified as
12659	481	a = 0
3219	1176	b = 1

## 24. MultiClassClassifierUpdateable

=== Summary ===

Correctly Classified Instances	13436	76.6239 %
Incorrectly Classified Instances	4099	23.3761 %
Kappa statistic	0.1944	
Mean absolute error	0.2338	
Root mean squared error	0.4835	
Relative absolute error	62.2273 %	
Root relative squared error	111.5616 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.958	0.808	0.780	0.958	0.860	0.241	0.575	0.779	0
	0.192	0.042	0.606	0.192	0.291	0.241	0.575	0.319	1
Weighted Avg.	0.766	0.616	0.737	0.766	0.718	0.241	0.575	0.663	

=== Confusion Matrix ===

```

a      b    <-- classified as
12593  547 |    a = 0
3552   843 |    b = 1

```

## 25. MultiScheme

=== Summary ===

Correctly Classified Instances	13140	74.9358 %
Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.3757	
Root mean squared error	0.4334	
Relative absolute error	100	%
Root relative squared error	100	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0
	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

```

a      b    <-- classified as
13140   0 |    a = 0
4395    0 |    b = 1

```

## 26. RandomCommittee

=== Summary ===

Correctly Classified Instances	13330	76.0194 %
Incorrectly Classified Instances	4205	23.9806 %
Kappa statistic	0.2508	
Mean absolute error	0.3067	
Root mean squared error	0.4525	
Relative absolute error	81.644	%
Root relative squared error	104.4153	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

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

	0.914	0.701	0.796	0.914	0.851	0.268	0.642	0.811	0
	0.299	0.086	0.539	0.299	0.385	0.268	0.642	0.404	1
Weighted Avg.	0.760	0.546	0.732	0.760	0.734	0.268	0.642	0.709	

=== Confusion Matrix ===

```

      a      b    <-- classified as
12014 1126 |      a = 0
3079  1316 |      b = 1

```

## 27. RandomizableFilteredClassifier

=== Summary ===

Correctly Classified Instances	13277	75.7171 %
Incorrectly Classified Instances	4258	24.2829 %
Kappa statistic	0.24	
Mean absolute error	0.3065	
Root mean squared error	0.4689	
Relative absolute error	81.5969 %	
Root relative squared error	108.1875 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.913	0.709	0.794	0.913	0.849	0.256	0.627	0.807	0
	0.291	0.087	0.528	0.291	0.375	0.256	0.627	0.414	1
Weighted Avg.	0.757	0.553	0.727	0.757	0.730	0.256	0.627	0.708	

=== Confusion Matrix ===

```

      a      b    <-- classified as
11998 1142 |      a = 0
3116  1279 |      b = 1

```

## 28. RandomSubSpace

=== Summary ===

Correctly Classified Instances	13697	78.1123 %
Incorrectly Classified Instances	3838	21.8877 %
Kappa statistic	0.2192	
Mean absolute error	0.3341	
Root mean squared error	0.4021	
Relative absolute error	88.9262 %	



Root relative squared error	92.7845 %
Total Number of Instances	17535

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.982	0.818	0.782	0.982	0.870	0.300	0.707	0.850	0
	0.182	0.018	0.767	0.182	0.294	0.300	0.707	0.525	1
Weighted Avg.	0.781	0.618	0.778	0.781	0.726	0.300	0.707	0.768	

=== Confusion Matrix ===

a	b	<-- classified as
12897	243	a = 0
3595	800	b = 1

## 29. Stacking

=== Summary ===

Correctly Classified Instances	13140	74.9358 %
Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.3757	
Root mean squared error	0.4334	
Relative absolute error	100	%
Root relative squared error	100	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0
	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

a	b	<-- classified as
13140	0	a = 0
4395	0	b = 1

## 30. Vote

== Summary ==

Correctly Classified Instances	13140	74.9358 %
Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.3757	
Root mean squared error	0.4334	
Relative absolute error	100	%
Root relative squared error	100	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0
	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

a	b	<-- classified as
13140	0	a = 0
4395	0	b = 1

### 31.WeightedInstancesHandlerWrapper

=== Summary ===

Correctly Classified Instances	13140	74.9358 %
Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.3757	
Root mean squared error	0.4334	
Relative absolute error	100	%
Root relative squared error	100	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0
	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

a	b	<-- classified as
---	---	-------------------

13140	0	a = 0
4395	0	b = 1

### 32. InputMappedClassifier

=== Summary ===

Correctly Classified Instances	13140	74.9358 %
Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.3757	
Root mean squared error	0.4334	
Relative absolute error	100	%
Root relative squared error	100	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0
	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

a	b	<-- classified as
13140	0	a = 0
4395	0	b = 1

### 33. DecisionTable

=== Summary ===

Correctly Classified Instances	13849	78.9792 %
Incorrectly Classified Instances	3686	21.0208 %
Kappa statistic	0.3002	
Mean absolute error	0.313	
Root mean squared error	0.3964	
Relative absolute error	83.3124 %	
Root relative squared error	91.4579 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0.960	0.720	0.799	0.960	0.873	0.347	0.714	0.856	0

	0.280	0.040	0.703	0.280	0.400	0.347	0.714	0.538	1
Weighted Avg.	0.790	0.550	0.775	0.790	0.754	0.347	0.714	0.776	

=== Confusion Matrix ===

```

      a      b  <-- classified as
12620  520 |      a = 0
 3166 1229 |      b = 1

```

### 34. JRip

=== Summary ===

Correctly Classified Instances	13738	78.3462 %
Incorrectly Classified Instances	3797	21.6538 %
Kappa statistic	0.2754	
Mean absolute error	0.3316	
Root mean squared error	0.4085	
Relative absolute error	88.277 %	
Root relative squared error	94.2654 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.958	0.739	0.795	0.958	0.869	0.321	0.612	0.795	0
	0.261	0.042	0.677	0.261	0.376	0.321	0.612	0.433	1
Weighted Avg.	0.783	0.564	0.765	0.783	0.746	0.321	0.612	0.704	

=== Confusion Matrix ===

```

      a      b  <-- classified as
12592  548 |      a = 0
 3249 1146 |      b = 1

```

### 35. OneR

=== Summary ===

Correctly Classified Instances	13434	76.6125 %
Incorrectly Classified Instances	4101	23.3875 %
Kappa statistic	0.131	
Mean absolute error	0.2339	
Root mean squared error	0.4836	
Relative absolute error	62.2577 %	
Root relative squared error	111.5888 %	

Total Number of Instances                      17535

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.986	0.893	0.768	0.986	0.863	0.215	0.547	0.767	0
	0.107	0.014	0.726	0.107	0.187	0.215	0.547	0.302	1
Weighted Avg.	0.766	0.672	0.757	0.766	0.694	0.215	0.547	0.651	

=== Confusion Matrix ===

a	b	<-- classified as
12962	178	a = 0
3923	472	b = 1

### 36. PART

=== Summary ===

Correctly Classified Instances	13838	78.9165 %
Incorrectly Classified Instances	3697	21.0835 %
Kappa statistic	0.312	
Mean absolute error	0.3132	
Root mean squared error	0.399	
Relative absolute error	83.3787 %	
Root relative squared error	92.0745 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.952	0.697	0.803	0.952	0.871	0.350	0.704	0.845	0
	0.303	0.048	0.678	0.303	0.418	0.350	0.704	0.519	1
Weighted Avg.	0.789	0.535	0.772	0.789	0.758	0.350	0.704	0.764	

=== Confusion Matrix ===

a	b	<-- classified as
12508	632	a = 0
3065	1330	b = 1

### 37. ZeroR

=== Summary ===

Correctly Classified Instances	13140	74.9358 %
--------------------------------	-------	-----------

Incorrectly Classified Instances	4395	25.0642 %
Kappa statistic	0	
Mean absolute error	0.3757	
Root mean squared error	0.4334	
Relative absolute error	100	%
Root relative squared error	100	%
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	1.000	1.000	0.749	1.000	0.857	?	0.500	0.749	0
	0.000	0.000	?	0.000	?	?	0.500	0.251	1
Weighted Avg.	0.749	0.749	?	0.749	?	?	0.500	0.624	

=== Confusion Matrix ===

a	b	<-- classified as
13140	0	a = 0
4395	0	b = 1

### 38. Decision Stump

=== Summary ===

Correctly Classified Instances	13380	76.3045 %
Incorrectly Classified Instances	4155	23.6955 %
Kappa statistic	0.1487	
Mean absolute error	0.3582	
Root mean squared error	0.4239	
Relative absolute error	95.3401 %	
Root relative squared error	97.8013 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.972	0.862	0.771	0.972	0.860	0.208	0.556	0.770	0
	0.138	0.028	0.623	0.138	0.226	0.208	0.556	0.333	1
Weighted Avg.	0.763	0.653	0.734	0.763	0.701	0.208	0.556	0.661	

=== Confusion Matrix ===

a	b	<-- classified as
12773	367	a = 0

3788 607 | b = 1

### 39. HoeffdingTree

=== Summary ===

Correctly Classified Instances	13771	78.5344 %
Incorrectly Classified Instances	3764	21.4656 %
Kappa statistic	0.2926	
Mean absolute error	0.3172	
Root mean squared error	0.4048	
Relative absolute error	84.4483 %	
Root relative squared error	93.397 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.953	0.717	0.799	0.953	0.869	0.333	0.683	0.834	0
	0.283	0.047	0.670	0.283	0.398	0.333	0.683	0.500	1
Weighted Avg.	0.785	0.549	0.767	0.785	0.751	0.333	0.683	0.750	

=== Confusion Matrix ===

a	b	<-- classified as
12527	613	a = 0
3151	1244	b = 1

### 40. J48

=== Summary ===

Correctly Classified Instances	13889	79.2073 %
Incorrectly Classified Instances	3646	20.7927 %
Kappa statistic	0.3213	
Mean absolute error	0.3149	
Root mean squared error	0.3994	
Relative absolute error	83.8237 %	
Root relative squared error	92.1588 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0.954	0.692	0.805	0.954	0.873	0.360	0.686	0.831	0
0.308	0.046	0.691	0.308	0.426	0.360	0.686	0.507	1

Weighted Avg.	0.792	0.530	0.776	0.792	0.761	0.360	0.686	0.750
---------------	-------	-------	-------	-------	-------	-------	-------	-------

=== Confusion Matrix ===

a	b	<-- classified as
12535	605	a = 0
3041	1354	b = 1

#### 41. LMT

=== Summary ===

Correctly Classified Instances	13870	79.0989 %
Incorrectly Classified Instances	3665	20.9011 %
Kappa statistic	0.3123	
Mean absolute error	0.3098	
Root mean squared error	0.3945	
Relative absolute error	82.4754 %	
Root relative squared error	91.0197 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.956	0.704	0.803	0.956	0.873	0.354	0.725	0.865	0
	0.296	0.044	0.695	0.296	0.415	0.354	0.725	0.547	1
Weighted Avg.	0.791	0.538	0.776	0.791	0.758	0.354	0.725	0.785	

=== Confusion Matrix ===

a	b	<-- classified as
12568	572	a = 0
3093	1302	b = 1

#### 42. RandomForest

=== Summary ===

Correctly Classified Instances	13324	75.9852 %
Incorrectly Classified Instances	4211	24.0148 %
Kappa statistic	0.2685	
Mean absolute error	0.3072	
Root mean squared error	0.4299	
Relative absolute error	81.7636 %	
Root relative squared error	99.1916 %	
Total Number of Instances	17535	



=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.903	0.668	0.802	0.903	0.849	0.280	0.667	0.829	0
	0.332	0.097	0.534	0.332	0.409	0.280	0.667	0.470	1
Weighted Avg.	0.760	0.525	0.734	0.760	0.739	0.280	0.667	0.739	

=== Confusion Matrix ===

```
      a      b  <-- classified as
11867 1273 |      a = 0
 2938 1457 |      b = 1
```

### 43. Random Tree

=== Summary ===

Correctly Classified Instances	13270	75.6772 %
Incorrectly Classified Instances	4265	24.3228 %
Kappa statistic	0.2438	
Mean absolute error	0.3066	
Root mean squared error	0.4692	
Relative absolute error	81.6302 %	
Root relative squared error	108.2704 %	
Total Number of Instances	17535	

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.910	0.701	0.795	0.910	0.849	0.259	0.620	0.797	0
	0.299	0.090	0.526	0.299	0.381	0.259	0.620	0.383	1
Weighted Avg.	0.757	0.548	0.728	0.757	0.731	0.259	0.620	0.693	

=== Confusion Matrix ===

```
      a      b  <-- classified as
11957 1183 |      a = 0
 3082 1313 |      b = 1
```

### 44. REPTree

=== Summary ===

Correctly Classified Instances	13779	78.58 %
Incorrectly Classified Instances	3756	21.42 %

Kappa statistic	0.304
Mean absolute error	0.3114
Root mean squared error	0.401
Relative absolute error	82.9034 %
Root relative squared error	92.5264 %
Total Number of Instances	17535

=== Detailed Accuracy By Class ===

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
	0.948	0.699	0.802	0.948	0.869	0.339	0.710	0.849	0
	0.301	0.052	0.659	0.301	0.413	0.339	0.710	0.513	1
Weighted Avg.	0.786	0.537	0.766	0.786	0.755	0.339	0.710	0.765	

=== Confusion Matrix ===

a	b	<-- classified as
12455	685	a = 0
3071	1324	b = 1