

Weka Results

Saturday, November 27, 2021 2:22 PM

Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Classifier

Choose ZeroR

Test options

(Use training set) Supplied test set Set... Cross-validation Folds 10 Percentage split % 66 More options...

(Nom) stroke Start Stop

Result list (right-click for options)

14:14:12 - rules.ZeroR

Classifier output

```
Time taken to build model: 0.02 seconds

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

Correctly Classified Instances      4861      95.1272 %
Incorrectly Classified Instances    249       4.8728 %
Kappa statistic                      0
Mean absolute error                  0.0929
Root mean squared error              0.2153
Relative absolute error               100 %
Root relative squared error          100 %
Total Number of Instances           5110
```

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

      TP Rate   FP Rate   Precision   Recall   F-Measure   MCC   ROC Area   PRC Area   Class
        1.000     1.000     0.951     1.000     0.975     ?     0.498     0.951     0
        0.000     0.000     ?         0.000     ?         ?     0.498     0.049     1
Weighted Avg.     0.951     0.951     ?         0.951     ?         ?     0.498     0.907
```

```
==== Confusion Matrix ====

      a      b  <-- classified as
4861  0 |  a = 0
249   0 |  b = 1
```

Status

OK Log x 0

Type here to search

Windows Taskbar: Chrome, File Explorer, Spotify, Matlab, Notepad, etc.

Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Classifier

Choose OneR D 6

Test options

(Use training set) Supplied test set Set... Cross-validation Folds 10 Percentage split % 66 More options...

(Nom) stroke Start Stop

Result list (right-click for options)

16:36:43 - rules.OneR

Classifier output

```
Time taken to build model: 0.18 seconds

==== Run information ====
Scheme: weka.classifiers.rules.OneR-D C
Dataset: heart-disease.arff
Instances: 5110
Attributes: 13
Class: gender, age, hypertension, heart_disease, ever_married, work_type, Residence_type, avg_glucose_level, bmi, smoking_status, stroke

Test model: 10-fold cross-validation

==== Classifier model (full training set) ====
AVG_GLUCOSE_LEVEL:
  >= 126.75  -> 0
  >= 249.75  -> 1
(4862/5110 instances correct)
```

```
==== Stratified cross-validation ====
==== Summary ===

Correctly Classified Instances      4860      95.1076 %
Incorrectly Classified Instances    250       4.8924 %
Kappa statistic                      -0.0004
Mean absolute error                  0.0489
Root mean squared error              0.2212
Relative absolute error               102.7348 %
Root relative squared error          102.7348 %
Total Number of Instances           5110
```

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

      TP Rate   FP Rate   Precision   Recall   F-Measure   MCC   ROC Area   PRC Area   Class
        1.000     1.000     0.951     1.000     0.975   -0.003   0.500     0.951     0
        0.000     0.000     0.000     0.000     0.000   -0.003   0.500     0.049     1
Weighted Avg.     0.951     0.951     0.905     0.951     0.927   -0.003   0.500     0.907
```

```
==== Confusion Matrix ====

      a      b  <-- classified as
4860  1 |  a = 0
249   0 |  b = 1
```

Status

OK Log x 0

Type here to search

Windows Taskbar: Chrome, File Explorer, Spotify, Matlab, Notepad, etc.

Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Classifier

Choose RandomForest -P 100 -I 100 -num-slots 1 -K 0 -M 1.0 -V 0.001 -S 1

Test options

- Use training set
- Supplied test set Set...
- Cross-validation Folds 10
- Percentage split % 66

More options...

(Nom) stroke

Start Stop

Result list (right-click for options)

- 16.3543 - rules.OneR
- 16:37:59 - trees.J48
- 16:38:23 - trees.RandomForest**

Classifier output

```

Time taken to build model: 7.28 seconds

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

Correctly Classified Instances      4859      95.0881 %
Incorrectly Classified Instances    251       4.9119 %
Kappa statistic                   -0.0008
Mean absolute error               0.0887
Root mean squared error          0.2131
Relative absolute error           95.4516 %
Root relative squared error     98.9654 %
Total Number of Instances        5110

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

      TP Rate   FP Rate   Precision   Recall   F-Measure   MCC   ROC Area   PRC Area   Class
0       1.000     0.000     0.951     1.000     0.975     -0.004     0.793     0.985     0
1       0.000     0.000     0.000     0.000     0.000     -0.004     0.793     0.136     1
Weighted Avg.     0.951     0.951     0.905     0.951     0.927     -0.004     0.793     0.944

==== Confusion Matrix ====

      a     b   <-- classified as
4859   2 |   a = 0
249    0 |   b = 1
  
```

Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Classifier

Choose RandomForest -P 100 -I 100 -num-slots 1 -K 0 -M 1.0 -V 0.001 -S 1

Test options

- Use training set
- Supplied test set Set...
- Cross-validation Folds 10
- Percentage split % 66

More options...

(Nom) stroke

Start Stop

Result list (right-click for options)

- 16.3543 - rules.OneR
- 16:37:59 - trees.J48
- 16:38:23 - trees.RandomForest**

Classifier output

```

Time taken to build model: 1.47 seconds

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

Correctly Classified Instances      4861      95.1272 %
Incorrectly Classified Instances    249       4.8728 %
Kappa statistic                   0
Mean absolute error               0.0927
Root mean squared error          0.2153
Relative absolute error           99.8094 %
Root relative squared error     100 %
Total Number of Instances        5110

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

      TP Rate   FP Rate   Precision   Recall   F-Measure   MCC   ROC Area   PRC Area   Class
0       1.000     0.000     0.951     1.000     0.975     ?     0.498     0.951     0
1       0.000     0.000     ?         0.000     ?         ?     0.498     0.045     1
Weighted Avg.     0.951     0.951     ?         0.951     ?         ?     0.498     0.907

==== Confusion Matrix ====

      a     b   <-- classified as
4861   0 |   a = 0
249    0 |   b = 1
  
```

Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Classifier

Choose RandomTree -K 0 -M 1.0 -V 0.001 -B 1

Test options

- Use training set
- Supplied test set Set...
- Cross-validation Folds 10
- Percentage split % 66

More options...

(Nom) stroke

Start Stop

Result list (right-click for options)

- 16.35.43 - rules.OneR
- 16.37.59 - trees.J48
- 16.38.23 - trees.RandomForest
- 16.41.26 - trees RandomTree**

Classifier output

```
Time taken to build model: 0.07 seconds
===
Stratified cross-validation ===
===
Summary ===

Correctly Classified Instances      4661      91.2133 %
Incorrectly Classified Instances    449      8.7867 %
Kappa statistic                      0.0647
Mean absolute error                  0.089
Root mean squared error              0.2941
Relative absolute error              95.8621 %
Root relative squared error         136.6124 %
Total Number of Instances           5110
```

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

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0	0.953	0.888	0.954	0.953	0.954	0.065	0.562	0.957	0
1	0.112	0.047	0.109	0.112	0.111	0.065	0.547	0.061	1
Weighted Avg.	0.912	0.847	0.913	0.912	0.913	0.065	0.562	0.914	

```
===
Confusion Matrix ===
```

	a	b	<-- classified as
a	4633	228	a = 0
b	221	28	b = 1

Status

OK Log x0

Type here to search

441 PM 11/27/2021

Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Classifier

Choose MultilayerPerceptron -L 0.3 -M 0.2 -N 500 -V 0 -S 0 -E 20 -H a

Test options

- Use training set
- Supplied test set Set...
- Cross-validation Folds 10
- Percentage split % 66

More options...

(Nom) stroke

Start Stop

Result list (right-click for options)

- 16.35.43 - rules.OneR
- 16.37.59 - trees.J48
- 16.38.23 - trees.RandomForest
- 16.41.26 - trees.RandomTree
- 16.42.58 - functions.MultilayerPerceptron**

Classifier output

```
Time taken to build model: 59.21 seconds
===
Stratified cross-validation ===
===
Summary ===

Correctly Classified Instances      4785      93.6399 %
Incorrectly Classified Instances    325      6.3601 %
Kappa statistic                      0.13
Mean absolute error                  0.0679
Root mean squared error              0.2384
Relative absolute error              73.0955 %
Root relative squared error         110.7306 %
Total Number of Instances           5110
```

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

	TP Rate	FP Rate	Precision	Recall	F-Measure	MCC	ROC Area	PRC Area	Class
0	0.978	0.876	0.956	0.978	0.967	0.136	0.762	0.983	0
1	0.124	0.022	0.225	0.124	0.160	0.136	0.762	0.136	1
Weighted Avg.	0.936	0.834	0.921	0.936	0.928	0.136	0.762	0.942	

```
===
Confusion Matrix ===
```

	a	b	<-- classified as
a	4754	107	a = 0
b	218	31	b = 1

Status

OK Log x0

Type here to search

4:53 PM 11/27/2021

Weka Explorer

Preprocess Classify Cluster Associate Select attributes Visualize

Classifier

Choose NaiveBayes

Test options

(Use training set) Supplied test set Set... Cross-validation Folds 10 Percentage split % 66 More options...

(Nom) stroke

Start Stop

Result list (right-click for options)

- 16:35:43 - rules.OneR
- 16:37:59 - trees.J48
- 16:38:23 - trees.RandomForest
- 16:41:26 - trees.RandomTree
- 16:42:58 - functions.MultilayerPerceptron
- 16:56:05 - bayes.NaiveBayes

Classifier output

```
Time taken to build model: 0.18 seconds
===
Stratified cross-validation ===
Summary ===

Correctly Classified Instances      4527      88.591 %
Incorrectly Classified Instances    583      11.409 %
Kappa statistic                   0.161
Mean absolute error               0.1328
Root mean squared error           0.2878
Relative absolute error           142.9228 %
Root relative squared error      135.6562 %
Total Number of Instances         5110

Detailed Accuracy By Class ===

          TP Rate  FP Rate  Precision  Recall   F-Measure  MCC     ROC Area  PRC Area  Class
          0.915   0.679   0.963   0.915   0.938   0.172   0.818   0.988   0
          0.321   0.085   0.162   0.321   0.215   0.172   0.818   0.167   1
Weighted Avg.   0.886   0.650   0.924   0.886   0.903   0.172   0.818   0.948

Confusion Matrix ===

      a     b  <-- classified as
4447  414 |  a = 0
169   80 |  b = 1
```

Status

OK Log x0

Type here to search

The screenshot shows the Weka Explorer interface. At the top, there's a menu bar with tabs: Preprocess, Classify, Cluster, Associate, Select attributes, and Visualize. Below the menu is a toolbar with icons for different classifiers. The main area is titled 'Classifier' and has a sub-section 'Choose' with 'NaiveBayes' selected. On the left, 'Test options' are set to 'Cross-validation' with 10 folds. A 'Result list' on the right shows various classifiers tried, with 'NaiveBayes' currently selected. The central 'Classifier output' pane displays performance metrics for the chosen classifier, including accuracy, precision, recall, and a confusion matrix. At the bottom, a taskbar shows the Windows Start button, a search bar, and several pinned application icons like Google Chrome, Spotify, and MATLAB. The system tray on the right shows the date and time (11/27/2021, 4:56 PM), battery level (1%), and network status.