

**Weka Explorer**

Preprocess **Classify** Cluster Associate Select attributes Visualize

Classifier

Choose **REPTree-M 2 -V 0.001 -N 3 -S 1 -L -1 -I 0.0**

Test options

☐ Use training set

☐ Supplied test set

☒ Cross-validation Folds

☐ Percentage split %

(Nom) class

Result list (right-click for options)

12:20:02 - trees.REPTree

Classifier output

```

| | wage-increase-first-year < 4.25 : bad (3.5/0.5) [1/0]
| | wage-increase-first-year >= 4.25 : good (3/0) [2.25/1]
| statutory-holidays >= 10.5 : good (19.5/0) [10.43/1]

Size of the tree : 9

Time taken to build model: 0 seconds

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

Correctly Classified Instances      45      78.9474 %
Incorrectly Classified Instances    12      21.0526 %
Kappa statistic                    0.5378
Mean absolute error                 0.2891
Root mean squared error             0.4433
Relative absolute error             63.2058 %
Root relative squared error         92.8518 %
Total Number of Instances          57


=== Detailed Accuracy By Class ===

              TP Rate  FP Rate  Precision  Recall  F-Measure  MOC      ROC Area  PRC Area  Class
0.700    0.162    0.700    0.700    0.700    0.538    0.701    0.567    bad
0.838    0.300    0.838    0.838    0.838    0.538    0.701    0.731    good
Weighted Avg.   0.789    0.252    0.789    0.789    0.789    0.538    0.701    0.674

=== Confusion Matrix ===

  a  b  <-- classified as
14  6  |  a = bad
 6 31  |  b = good

```

Status OK   x 0

**Weka Explorer**

Preprocess **Cluster** Associate Select attributes Visualize

Clusterer

Choose **SimpleKMeans -init 0 -max-candidates 100 -periodic-pruning 10000 -min-density 2.0 -t1 -1.25 -t2 -1.0 -N 2 -A "weka.core.EuclideanDistance -R first-last" -I 500 -num-slots 1**

Cluster mode

☒ Use training set

☐ Supplied test set

☐ Percentage split %

☐ Classes to clusters evaluation

(Nom) class

☒ Store clusters for visualization

Result list (right-click for options)

12:18:44 - SimpleKMeans

Clusterer output

```

=====
(57.0)      (48.0)      (9.0)
=====
Anuj (20BCS5542)      2.1607      2.2533      1.6667
wage-increase-first-year      3.8036      3.9834      2.8444
wage-increase-second-year      3.9717      4.0209      3.7097
wage-increase-third-year      3.9133      3.9511      3.7119
cost-of-living-adjustment      none      none      none
working-hours      38.0392      37.7541      39.5599
pension      empl_contr      empl_contr      none
standby-pay      7.4444      7.7431      5.8519
shift-differential      4.871      5.2298      2.957
education-allowance      no      no      no
statutory-holidays      11.0943      11.237      10.3333
vacation      below_average      below_average      below_average
longterm-disability-assistance      yes      yes      no
contribution-to-dental-plan      half      half      none
bereavement-assistance      yes      yes      yes
contribution-to-health-plan      full      full      none
class      good      good      bad


Time taken to build model (full training data) : 0.01 seconds

=== Model and evaluation on training set ===

Clustered Instances

0      48 ( 84%)
1      9 ( 16%)

```

Status OK   x 0