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# Introduction

Redescription mining (RM) is a descriptive data mining task aimed at finding re-descriptions (multiple descriptions) of different subsets of entities contained in the data. Redescription is a tuple of logical formulas (called queries) where each formula contains attributes from one data view. Queries can contain conjunction, disjunction and negation logical operators. Currently, redescription mining uses at most two different views to re-describe entities contained in the data. Redescription mining offers unique insight into the data by finding groups that are similar with respect to both views and at the same times provide concise and understandable descriptions. Redescription mining is especially useful to discover different (potentially non-linear) associations between different subsets of attributes. CLUS-RM is a redescription mining algorithm based on Predictive Clustering Trees (PCTs). It is also equipped with a redescription set optimization procedure which allows users to control the number of returned redescriptions. The algorithm has been extended to allow adding attribute constraints to the redescription mining process. These constraints are added as a predefined sets of attributes that should occur in redescription queries. There are three types of attribute constraints and corresponding redescription set construction types available when using attribute constraints: a) "suggested", b) "soft" and c) "hard". In suggested constraint-based redescription mining, redescriptions satisfying user-defined constraints are given higher score, thus are more likely to occur in the output redescription set. Soft constraint-based redescription mining takes into account only redescriptions that satisfy at least part of one predefined attribute constraint set. Hard constraint-based redescription mining takes into account only redescriptions fully satisfying at least one pre-defined constraint set.

The algorithm takes the following parameters:

* *Descriptive variables:* A set of descriptive variables, which are used to describe different subsets of entities contained in the data.
* View 1 (W1): Index of a start and end attribute contained in the first data view (attributes must have consecutive indices).
* *View 2 (W2): Index of a start and end attribute contained in the second data view (attributes must have consecutive indices).*
* *Minimal* Jaccard index: Specify minimal redescription accuracy (measured with Jaccard index) required to return it to the user. Parameter values are contained in [0,1].
* *Maximal p-value: Specify maximal* redescription p-value required to return it to the user. Parameter values are contained in [0,1].
* *Minimal* redescription support: Specify minimal redescription support required to return it to the user. Parameter values are contained in [1,|E|], where |E| denotes number of entities in the dataset.
* *Maximal* redescription support: Specify maximal redescription support allowed. Parameter values are contained in [1,|E|], where |E| denotes number of entities in the dataset.
* *Number of random restarts (initializations): Specify the number of random initialization steps performed by the CLUS-RM.*
* *Number of iteration: Specify the number of iterations (also called alternations) performed by the CLUS-RM.*
* *Number of* redescriptions: Specify the number of redescriptions to be returned by the CLUS-RM.
* *Attribute importance for attributes from view 1: Specify the attribute importance used in constraint-based* redescription mining for attributes contained in the first view. Possible values are: "none" - allow redescriptions with any attributes from view1, "suggested" - allow defining combinations of attributes that increase redescription score (redescriptions containing specified attributes are preferred), "soft" - only return redescriptions satisfying at least part of specified constraints to the user (redescriptions satisfying larger portion of constraint set are preferred), "hard" - only return redescriptions satisfying all constraints defined in one constraint set.
* *Attribute importance for attributes from view 2: Specify the attribute importance used in constraint-based* redescription mining for attributes contained in the second view. Possible values are: "none" - allow redescriptions with any attributes from view2, "suggested" - allow defining combinations of attributes that increase redescription score (redescriptions containing specified attributes are preferred), "soft" - only return redescriptions satisfying at least part of specified constraints to the user (redescriptions satisfying larger portion of constraint set are preferred), "hard" - only return redescriptions satisfying all constraints defined in one constraint set.
* *Important attributes from view 1: defines constraint sets, for attributes contained in view 1, to be used in constraint-based* redescription mining. Constraints are specified in the format "{a;b;c},{a;d}", where a,b,c,d are some attributes contained in the first view (view1) of the data.
* *Important attributes from view 2: defines constraint sets, for attributes contained in view 2, to be used in constraint-based* redescription mining. Constraints are specified in the format "{e;f;g},{h;i}", where e,f,g,h,i are some attributes contained in the second view (view2) of the data.

## Algorithm inputs

The algorithm supports finding redescriptions with numerical, categorical and Boolean attributes.

## Algorithm output

As needed by the MIP, our algorithm produces a VisJS visualization. Below we provide output for different output types.

#### HTML

|  |
| --- |
| <html>  <body>  <div id="#algorithm">  <h1><b>Redescription Set: </b></h1>  <h2> <b> Redescriptions: </b> </h2>  <div>  <div>&nbsp;&nbsp;<span class="q1"> <b>W1Q:</b> a1 = 1 </span></div>  <div>&nbsp;&nbsp;<span class="q2"> <b>W2Q:</b> b4 = 1 </span></div>  <br>  <div>&nbsp;&nbsp;&nbsp;<span class="js"><b>JS: </b>1.0</span></div>  <div>&nbsp;&nbsp;<span class="pvalue"> <b>p-value:  </b>0.08084327211505504</span></div>  <div>&nbsp;&nbsp;<span class="supp"> <b>support intersection:  </b>12</span></div>  <div>&nbsp;&nbsp;<span class="suppunion"> <b>support union:  </b>12</span></div>  <br>  <div>  &nbsp;&nbsp;  <span class="ce">  <b>covered examples (intersection): </b><br>  <div>&nbsp;&nbsp;"e13" "e5" "e14" "e4" "e11" "e12" "e2" "e1" "e9"  "e8" "e7" "e6" </div>  </span>  </div>  <div>  &nbsp;&nbsp;  <span class="ceu">  <b>covered examples (union): </b><br>  <div>&nbsp;&nbsp;"e13" "e5" "e14" "e4" "e11" "e12" "e2" "e1" "e9"  "e8" "e7" "e6" </div>  </span>  </div>  </div>  <br><br>  </div>  </body>  </html> |

# Tests

We have also prepared an integration test of the algorithm. The tests run the algorithm on the datasets which are available in the algorithm-factory-demo database. To setup the testing environment, the following docker configuration was used:

|  |
| --- |
| ---  version: '2'  services:  db:  image: postgres:9.6.5-alpine  hostname: db  environment:  POSTGRES\_PASSWORD: test  wait\_dbs:  image: "waisbrot/wait"  restart: "no"  environment:  TARGETS: "db:5432"  TIMEOUT: 60  create\_dbs:  image: "hbpmip/create-databases:1.0.0"  restart: "no"  environment:  DB\_HOST: db  DB\_PORT: 5432  DB\_ADMIN\_USER: postgres  DB\_ADMIN\_PASSWORD: test  DB1: features  USER1: features  PASSWORD1: featurespwd  DB2: woken  USER2: woken  PASSWORD2: wokenpwd  depends\_on:  - db  sample\_data\_db\_setup:  image: "hbpmip/sample-data-db-setup:0.6.1"  container\_name: "data-db-setup"  restart: "no"  environment:  FLYWAY\_DBMS: postgresql  FLYWAY\_HOST: db  FLYWAY\_PORT: 5432  FLYWAY\_DATABASE\_NAME: features  FLYWAY\_USER: postgres  FLYWAY\_PASSWORD: test  depends\_on:  - db  woken\_db\_setup:  image: "hbpmip/woken-db-setup:latest"  container\_name: "woken-db-setup"  restart: "no"  environment:  FLYWAY\_DBMS: postgresql  FLYWAY\_HOST: db  FLYWAY\_PORT: 5432  FLYWAY\_DATABASE\_NAME: woken  FLYWAY\_USER: postgres  FLYWAY\_PASSWORD: test  depends\_on:  - db  clus-rm:  image: "hbpmip/java-jsi-clus-rm:latest"  container\_name: "clus-rm"  restart: "no"  environment:  NODE: job\_test  JOB\_ID: 1  IN\_JDBC\_DRIVER: org.postgresql.Driver  IN\_JDBC\_URL: jdbc:postgresql://db:5432/features  IN\_JDBC\_USER: features  IN\_JDBC\_PASSWORD: featurespwd  OUT\_JDBC\_DRIVER: org.postgresql.Driver  OUT\_JDBC\_URL: jdbc:postgresql://db:5432/woken  OUT\_JDBC\_USER: woken  OUT\_JDBC\_PASSWORD: wokenpwd  PARAM\_variables: "score\_test1,stress\_before\_test1,score\_math\_course1,score\_math\_course2"  PARAM\_covariables: "iq,cognitive\_task2,practice\_task2,response\_time\_task2,college\_math"  PARAM\_query: "SELECT stress\_before\_test1,score\_test1,iq,cognitive\_task2,practice\_task2,response\_time\_task2,college\_math,score\_math\_course1,score\_math\_course2 FROM SAMPLE\_DATA"  FUNCTION: java-jsi-clus-rm  MODEL\_PARAM\_W1: "1-5"  MODEL\_PARAM\_W2: "6-9"  links:  - "db:db" |

# Integration tests output

|  |
| --- |
| [java-jsi-clus-rm] ./tests/test.sh  Starting the databases...  Creating network "tests\_default" with the default driver  Creating tests\_db\_1 ... done  Waiting for db:5432 .... up!  Everything is up  Starting tests\_db\_1 ... done  PLAY [localhost] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  TASK [Create the new database(s)"] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  changed: [localhost] => (item={'password': 'featurespwd', 'db': 'features', 'user': 'features'})  changed: [localhost] => (item={'password': u'wokenpwd', 'db': u'woken', 'user': u'woken'})  TASK [Create user(s)] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  changed: [localhost] => (item={'password': 'featurespwd', 'db': 'features', 'user': 'features'})  changed: [localhost] => (item={'password': u'wokenpwd', 'db': u'woken', 'user': u'woken'})  PLAY RECAP \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*  localhost : ok=2 changed=2 unreachable=0 failed=0  Initialise the databases...  Starting tests\_db\_1 ... done  2018/05/11 12:03:43 Waiting for: tcp://db:5432  2018/05/11 12:03:43 Connected to tcp://db:5432  Flyway 4.2.0 by Boxfuse  Database: jdbc:postgresql://db:5432/features (PostgreSQL 9.6)  Successfully validated 9 migrations (execution time 00:00.051s)  Creating Metadata table: "public"."schema\_version"  Current version of schema "public": << Empty Schema >>  Migrating schema "public" to version 1.0 - create  Migrating schema "public" to version 1.1 - churn  Migrating schema "public" to version 1.2 - iris  Migrating schema "public" to version 1.3 - dummy ldsm  Migrating schema "public" to version 1.4 - dummy federation  Migrating schema "public" to version 1.5 - synthetic datasets  Migrating schema "public" to version 1.6 - mixed datasets  Migrating schema "public" with repeatable migration Create view  Migrating schema "public" with repeatable migration Setup datasets linreg\_sample,churn,iris,desd\_synth,nida\_synth,qqni\_synth,desd\_mixed,nida\_mixed,qqni\_mixed  May 11, 2018 12:03:46 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset linreg\_sample...  May 11, 2018 12:03:46 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset churn...  May 11, 2018 12:03:47 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset iris...  May 11, 2018 12:03:47 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset desd\_synth...  May 11, 2018 12:03:48 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset nida\_synth...  May 11, 2018 12:03:49 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset qqni\_synth...  May 11, 2018 12:03:49 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset desd\_mixed...  May 11, 2018 12:03:50 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset nida\_mixed...  May 11, 2018 12:03:51 PM eu.humanbrainproject.mip.migrations.R\_\_SetupValues migrate  INFO: Migrating dataset qqni\_mixed...  Successfully applied 9 migrations to schema "public" (execution time 00:06.630s).  2018/05/11 12:03:51 Command finished successfully.  Starting tests\_db\_1 ... done  2018/05/11 12:03:54 Waiting for: tcp://db:5432  2018/05/11 12:03:54 Connected to tcp://db:5432  Flyway 4.2.0 by Boxfuse  Database: jdbc:postgresql://db:5432/woken (PostgreSQL 9.6)  Successfully validated 1 migration (execution time 00:00.008s)  Creating Metadata table: "public"."schema\_version"  Current version of schema "public": << Empty Schema >>  Migrating schema "public" to version 1.0 - create  Successfully applied 1 migration to schema "public" (execution time 00:00.419s).  2018/05/11 12:03:55 Command finished successfully.  Run the CLUS RM algorithm...  Starting tests\_db\_1 ... done  May 11, 2018 12:03:58 PM com.github.fommil.netlib.ARPACK <clinit>  WARNING: Failed to load implementation from: com.github.fommil.netlib.NativeSystemARPACK  May 11, 2018 12:03:59 PM com.github.fommil.netlib.ARPACK <clinit>  WARNING: Failed to load implementation from: com.github.fommil.netlib.NativeRefARPACK  Path: /usr/share/jars/experiment.set  [Ljava.lang.String;@5c647e05  [Ljava.lang.String;@33909752  Input: [experimentW1.arff, input2.arff]  Input: [experimentW1.arff, experimentW2.arff]  Adding default preference parameters...  In order to control redescription stability and get information about different JS measures RedStability parameter preference must be >0  Num targets: 1600  Num trees in RS: 1  Average tree depth in RS: 2147483647  Allow left side rule negation: false  Allow right side rule negation: false  Allow left side rule disjunction: false  Allow right side rule disjunction: false  Types of LSTrees: 1  Types of RSTrees: 1  Use Network information: [false, false]  Spatial matrix: []  Spatial measure: []  Attribute importance gen:  0 0  Important attributes:  , +  , +  Read dataset num doubles: 5  Read dataset num doubles: 4  lastDouble: 5  Number of numeric attributes in remaining datasets: 4  Path: /usr/share/jars/Jinput.arff  Number of redescriptions: 50  Read dataset num doubles: 9  initial lastDouble: 9  old attr size: 10  new attr size: 11  Doing initial clustering...  data list size: 150  Num shuffling steps: 11  0.6666666666666667% completed...  1.3333333333333335% completed...  2.0% completed...  2.666666666666667% completed...  3.3333333333333335% completed...  4.0% completed...  4.666666666666667% completed...  5.333333333333334% completed...  6.0% completed...  6.666666666666667% completed...  7.333333333333333% completed...  8.0% completed...  8.666666666666668% completed...  9.333333333333334% completed...  10.0% completed...  10.666666666666668% completed...  11.333333333333332% completed...  12.0% completed...  12.666666666666668% completed...  13.333333333333334% completed...  14.000000000000002% completed...  14.666666666666666% completed...  15.333333333333332% completed...  16.0% completed...  16.666666666666664% completed...  17.333333333333336% completed...  18.0% completed...  18.666666666666668% completed...  19.333333333333332% completed...  20.0% completed...  20.666666666666668% completed...  21.333333333333336% completed...  22.0% completed...  22.666666666666664% completed...  23.333333333333332% completed...  24.0% completed...  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69.33333333333334% completed...  70.0% completed...  70.66666666666667% completed...  71.33333333333334% completed...  72.0% completed...  72.66666666666667% completed...  73.33333333333333% completed...  74.0% completed...  74.66666666666667% completed...  75.33333333333333% completed...  76.0% completed...  76.66666666666667% completed...  77.33333333333333% completed...  78.0% completed...  78.66666666666666% completed...  79.33333333333333% completed...  80.0% completed...  80.66666666666666% completed...  81.33333333333333% completed...  82.0% completed...  82.66666666666667% completed...  83.33333333333334% completed...  84.0% completed...  84.66666666666667% completed...  85.33333333333334% completed...  86.0% completed...  86.66666666666667% completed...  87.33333333333333% completed...  88.0% completed...  88.66666666666667% completed...  89.33333333333333% completed...  90.0% completed...  90.66666666666666% completed...  91.33333333333333% completed...  92.0% completed...  92.66666666666666% completed...  93.33333333333333% completed...  94.0% completed...  94.66666666666667% completed...  95.33333333333334% completed...  96.0% completed...  96.66666666666667% completed...  97.33333333333334% completed...  98.0% completed...  98.66666666666667% completed...  99.33333333333333% completed...  100.0% completed...  100% completed!  WIndexes size: 1  distance file size: 0  use nc: 2  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1'  Reading ARFF Header  Reading CSV Data  Found 300 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1], N=[4]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1], N=[1]  Test: cognitive\_task2 > 74.382926 -> 3.6567528035104715 I: 0.0  Test: stress\_before\_test1 > 61.915842 -> 1.428571428571427 I: 0.0  Test: practice\_task2 > 10.496528 -> 2.504534082608643 I: 0.0  Test: score\_test1 > 864.292854 -> 5.013888888888914 I: 0.0  Test: stress\_before\_test1 > 36.186858 -> 6.669444444444437 I: 0.0  Test: iq > 107.222237 -> 3.516161616161611 I: 0.0  Test: cognitive\_task2 > 46.627163 -> 6.528070175438597 I: 0.0  Test: stress\_before\_test1 > 42.915922 -> 3.688596491228073 I: 0.0  Test: stress\_before\_test1 > 60.833242 -> 1.75 I: 0.0  Test: stress\_before\_test1 > 43.995828 -> 1.2000000000000002 I: 0.0  Test: cognitive\_task2 > 51.029219 -> 13.578609625668449 I: 0.0  Test: iq > 101.397951 -> 1.7333333333333334 I: 0.0  Test: score\_test1 > 967.201557 -> 4.9910873440285215 I: 0.0  Test: stress\_before\_test1 > 58.323311 -> 6.914141414141412 I: 0.0  Test: score\_test1 > 1029.16402 -> 1.5 I: 0.0  Test: cognitive\_task2 > 46.61177 -> 6.2592592592592595 I: 0.0  Test: cognitive\_task2 > 40.810267 -> 3.0582010582010604 I: 0.0  Test: practice\_task2 > 14.942348 -> 2.887218045112782 I: 0.0  Test: stress\_before\_test1 > 45.654942 -> 3.6842105263157876 I: 0.0  Test: score\_test1 > 1011.560442 -> 2.333333333333332 I: 0.0  Test: score\_test1 > 1095.993787 -> 2.7777777777777786 I: 0.0  Test: cognitive\_task2 > 43.096414 -> 3.5555555555555554 I: 0.0  Test: iq > 92.116873 -> 2.666666666666667 I: 0.0  Test: iq > 88.757725 -> 1.3333333333333321 I: 0.0  Test: stress\_before\_test1 > 36.371137 -> 12.807168784029038 I: 0.0  Test: stress\_before\_test1 > 62.791214 -> 10.758620689655173 I: 0.0  Test: score\_test1 > 789.196285 -> 8.08421052631579 I: 0.0  Test: iq > 87.240073 -> 3.26666666666667 I: 0.0  Test: iq > 119.266571 -> 1.6666666666666643 I: 0.0  Test: iq > 90.814573 -> 3.939756197781122 I: 0.0  Test: cognitive\_task2 > 42.796394 -> 10.75708008504607 I: 0.0  Test: score\_test1 > 1166.623585 -> 7.337529221363056 I: 0.0  Test: practice\_task2 > 10.009902 -> 8.307692307692307 I: 0.0  Test: cognitive\_task2 > 45.929715 -> 1.6923076923076925 I: 0.0  Test: cognitive\_task2 > 46.358474 -> 2.4891987431264795 I: 0.0  Test: iq > 97.953585 -> 8.25 I: 0.0  Test: stress\_before\_test1 > 59.26272 -> 3.3027295285359735 I: 0.0  Test: score\_test1 > 880.929522 -> 6.923076923076923 I: 0.0  Test: stress\_before\_test1 > 62.040961 -> 2.0 I: 0.0  Test: score\_test1 > 954.021822 -> 4.0 I: 0.0  Test: cognitive\_task2 > 51.173201 -> 1.5360983102918624 I: 0.0  Test: score\_test1 > 1116.800438 -> 1.4880952380952408 I: 0.0  Test: cognitive\_task2 > 63.999045 -> 2.083333333333332 I: 0.0  Test: practice\_task2 > 9.196324 -> 3.2666666666666693 I: 0.0  Test: iq > 108.282008 -> 3.5999999999999988 I: 0.0  Test: score\_test1 > 949.033636 -> 4.8 I: 0.0  Test: iq > 107.958453 -> 6.090225563909772 I: 0.0  Test: stress\_before\_test1 > 42.471609 -> 5.357142857142858 I: 0.0  Test: stress\_before\_test1 > 61.460883 -> 4.166666666666666 I: 0.0  Test: stress\_before\_test1 > 47.375366 -> 1.3333333333333335 I: 0.0  Test: iq > 99.470157 -> 3.0588235294117645 I: 0.0  Test: cognitive\_task2 > 47.689818 -> 15.372265829408697 I: 0.0  Test: iq > 75.047115 -> 1.6 I: 0.0  Test: iq > 73.585647 -> 2.769230769230763 I: 0.0  Test: cognitive\_task2 > 44.350966 -> 2.458181818181817 I: 0.0  Test: iq > 81.896689 -> 3.3246753246753267 I: 0.0  Test: iq > 87.997606 -> 3.6571428571428566 I: 0.0  Test: iq > 83.823716 -> 1.2000000000000002 I: 0.0  Test: stress\_before\_test1 > 56.158832 -> 1.645714285714286 I: 0.0  Test: stress\_before\_test1 > 59.454975 -> 3.0476190476190466 I: 0.0  Induction Time: 0.053 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 120 rules. (120 of them are unique.)  Number of models after: 3  null  Output written to: view1.out  filename: view1.model  Process 1 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2'  Reading ARFF Header  Reading CSV Data  Found 300 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1], N=[4]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1], N=[1]  Test: response\_time\_task2 > 1710.101716 -> 6.582417035673416 I: 0.0  Test: college\_math > -10.061457 -> 3.7226951081940456 I: 0.0  Test: score\_math\_course2 > 62.853874 -> 2.7204260477316495 I: 0.0  Test: score\_math\_course1 > 60.063912 -> 27.859826782145227 I: 0.0  Test: college\_math > 54.348685 -> 10.97142857142859 I: 0.0  Test: score\_math\_course1 > 62.358121 -> 4.761904761904759 I: 0.0  Test: college\_math > 58.894617 -> 1.4492753623188435 I: 0.0  Test: response\_time\_task2 > 2033.079524 -> 0.7826086956521578 I: 0.0  Test: score\_math\_course2 > 75.159449 -> 1.8570048309178837 I: 0.0  Test: score\_math\_course1 > 71.60712 -> 1.7777777777777715 I: 0.0  Test: score\_math\_course1 > 69.482244 -> 4.8 I: 0.0  Test: response\_time\_task2 > 1986.489768 -> 4.800000000000001 I: 0.0  Test: college\_math > 81.277035 -> 1.1999999999999993 I: 0.0  Test: score\_math\_course2 > 66.342595 -> 7.157894736842105 I: 0.0  Test: score\_math\_course1 > 59.160416 -> 32.12307692307691 I: 0.0  Test: score\_math\_course2 > 60.886824 -> 3.466666666666667 I: 0.0  Test: response\_time\_task2 > 2033.739504 -> 4.0 I: 0.0  Test: college\_math > 66.819797 -> 18.94666666666668 I: 0.0  Test: score\_math\_course1 > 42.362094 -> 1.6666666666666665 I: 0.0  Test: score\_math\_course1 > 46.767896 -> 3.2914285714285825 I: 0.0  Test: score\_math\_course2 > 53.164659 -> 11.083743842364527 I: 0.0  Test: college\_math > 30.165629 -> 4.085212201591503 I: 0.0  Test: score\_math\_course2 > 25.863572 -> 10.208333333333329 I: 0.0  Test: score\_math\_course1 > 20.794389 -> 8.193939393939406 I: 0.0  Test: response\_time\_task2 > 1823.436832 -> 1.472727272727269 I: 0.0  Test: college\_math > 32.260496 -> 0.7999999999999972 I: 0.0  Test: response\_time\_task2 > 2194.076018 -> 1.0 I: 0.0  Test: response\_time\_task2 > 1910.999473 -> 1.2000000000000002 I: 0.0  Test: response\_time\_task2 > 2676.282738 -> 4.71794871794872 I: 0.0  Test: college\_math > 0.662866 -> 6.076962335408808 I: 0.0  Test: college\_math > 16.05383 -> 5.197726671953475 I: 0.0  Test: college\_math > 23.004009 -> 3.1248945147679166 I: 0.0  Test: score\_math\_course1 > 29.343476 -> 3.3101932045303215 I: 0.0  Test: college\_math > 41.499814 -> 7.09904240766074 I: 0.0  Test: college\_math > 76.497755 -> 6.150086132644269 I: 0.0  Test: score\_math\_course2 > 89.77712 -> 10.083333333333334 I: 0.0  Test: score\_math\_course1 > 75.156358 -> 0.9999999999999996 I: 0.0  Test: score\_math\_course2 > 80.272883 -> 4.913255360623779 I: 0.0  Test: score\_math\_course1 > 62.358121 -> 7.5 I: 0.0  Test: score\_math\_course1 > 79.642274 -> 6.340557275541798 I: 0.0  Test: college\_math > 45.266463 -> 1.764705882352942 I: 0.0  Test: score\_math\_course1 > 44.679282 -> 5.082352941176471 I: 0.0  Test: score\_math\_course2 > 51.234367 -> 4.8 I: 0.0  Test: score\_math\_course2 > 26.582327 -> 12.631578947368421 I: 0.0  Test: response\_time\_task2 > 1419.619277 -> 1.1999999999999993 I: 0.0  Test: response\_time\_task2 > 1617.258555 -> 1.6923076923076925 I: 0.0  Induction Time: 0.049 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 92 rules. (92 of them are unique.)  Number of models after: 3  null  Output written to: view2.out  filename: view2.model  Process 1 side 2 finished!  OOIndRR: 0  OOIndRR1: 0  Iteration: 1  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view2.s  Path: /usr/share/jars/view1.s  New rule index: 0  Rule size: 77  nARules: 77  New number of attributes: 87  New size: 86  l: 9  inc: 77  l+inc: 86  Old size: 9  New rule index: 0  Rule size: 58  nARules: 58  New number of attributes: 68  New size: 67  l: 9  inc: 58  l+inc: 67  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights (77)  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights (77)  Test: score\_math\_course2 > 101.634809 -> 1.9208326706944092 I: 0.0  Test: response\_time\_task2 > 2140.474304 -> 2.13383747249305 I: 0.0  Test: college\_math > 12.063136 -> 1.9196226621557457 I: 0.0  Test: score\_math\_course1 > 60.39532 -> 1.4838984461922848 I: 0.0  Test: college\_math > 77.538161 -> 1.6498360618312518 I: 0.0  Test: college\_math > 82.192926 -> 1.675442102963249 I: 0.0  Test: score\_math\_course1 > 71.60712 -> 1.987265710273551 I: 0.0  Test: score\_math\_course1 > 84.909689 -> 1.478120739143442 I: 0.0  Test: response\_time\_task2 > 2358.810532 -> 1.946737061904095 I: 0.0  Test: score\_math\_course2 > 94.189521 -> 1.6591581565046205 I: 0.0  Test: response\_time\_task2 > 1998.326995 -> 1.3289721854436625 I: 0.0  Test: response\_time\_task2 > 1782.933049 -> 0.6191061861010954 I: 0.0  Test: college\_math > 84.638252 -> 0.5536557036701424 I: 0.0  Test: score\_math\_course1 > 87.025558 -> 2.3807309975893167 I: 0.0  Test: score\_math\_course2 > 86.301373 -> 1.8300030621757637 I: 0.0  Test: response\_time\_task2 > 1889.983127 -> 1.101729577234107 I: 0.0  Test: score\_math\_course1 > 83.575782 -> 0.748056030066544 I: 0.0  Test: response\_time\_task2 > 1848.471068 -> 0.316917832589521 I: 0.0  Test: score\_math\_course2 > 80.272883 -> 1.5550954145081874 I: 0.0  Test: score\_math\_course1 > 83.701207 -> 1.3310361202757446 I: 0.0  Test: college\_math > 72.513148 -> 0.462986094600047 I: 0.0  Test: score\_math\_course1 > 61.03088 -> 1.425718781479997 I: 0.0  Test: score\_math\_course2 > 72.999032 -> 1.1195608789536013 I: 0.0  Test: score\_math\_course2 > 74.69137 -> 1.0886199714320695 I: 0.0  Test: response\_time\_task2 > 1717.244774 -> 0.7471675536581852 I: 0.0  Test: score\_math\_course2 > 79.003596 -> 1.1339242267957683 I: 0.0  Test: college\_math > 66.030062 -> 1.127179476038621 I: 0.0  Test: score\_math\_course2 > 70.076451 -> 1.4469699565618688 I: 0.0  Test: response\_time\_task2 > 1732.988399 -> 0.2867071571570563 I: 0.0  Test: college\_math > 51.433236 -> 3.626340126517377 I: 0.0  Test: response\_time\_task2 > 1545.301482 -> 1.961067094093945 I: 0.0  Test: score\_math\_course2 > 66.419265 -> 1.5803442704682542 I: 0.0  Test: score\_math\_course2 > 55.414029 -> 1.3406375289315147 I: 0.0  Test: score\_math\_course2 > 56.547082 -> 2.0889425010168488 I: 0.0  Test: score\_math\_course1 > 57.295355 -> 1.346773841436054 I: 0.0  Test: score\_math\_course1 > 59.160416 -> 1.0662224795102184 I: 0.0  Test: score\_math\_course1 > 47.851528 -> 1.3019807937420151 I: 0.0  Test: score\_math\_course1 > 42.97013 -> 2.3203779103033426 I: 0.0  Test: response\_time\_task2 > 1970.49126 -> 1.167126750881165 I: 0.0  Test: response\_time\_task2 > 2257.402341 -> 1.333776105360673 I: 0.0  Test: score\_math\_course1 > 52.977409 -> 1.0983914965675008 I: 0.0  Test: score\_math\_course2 > 48.96481 -> 2.2232600260106494 I: 0.0  Test: score\_math\_course1 > 16.399815 -> 1.6347604038772978 I: 0.0  Test: score\_math\_course2 > 45.708495 -> 1.444138666904653 I: 0.0  Test: college\_math > 31.142282 -> 1.5439200854971489 I: 0.0  Test: score\_math\_course2 > 32.489291 -> 1.3606051711157097 I: 0.0  Test: score\_math\_course2 > 38.006712 -> 2.663234196140822 I: 0.0  Test: score\_math\_course2 > 44.412582 -> 1.069629053853249 I: 0.0  Test: score\_math\_course1 > 37.238268 -> 1.0073875089126272 I: 0.0  Test: college\_math > 36.632244 -> 1.678543112490011 I: 0.0  Test: response\_time\_task2 > 1690.616142 -> 0.9617251667809217 I: 0.0  Test: response\_time\_task2 > 2395.675533 -> 1.3141890399901675 I: 0.0  Test: score\_math\_course1 > 17.629787 -> 0.807046782874437 I: 0.0  Test: score\_math\_course1 > 25.044504 -> 0.9296897042076608 I: 0.0  Test: response\_time\_task2 > 2007.347339 -> 0.2160160999706502 I: 0.0  Test: score\_math\_course1 > 16.1271 -> 1.5887340633283604 I: 0.0  Test: response\_time\_task2 > 1443.470034 -> 0.9252478619790543 I: 0.0  Test: score\_math\_course1 > 17.211128 -> 2.757167131388961 I: 0.0  Test: score\_math\_course2 > 4.388894 -> 1.953810123596762 I: 0.0  Test: score\_math\_course1 > 2.57234 -> 1.2682055616113708 I: 0.0  Test: score\_math\_course2 > 17.456332 -> 0.9504567741537002 I: 0.0  Test: response\_time\_task2 > 2271.359299 -> 0.8244329603433158 I: 0.0  Test: response\_time\_task2 > 2061.037307 -> 0.33487550982096637 I: 0.0  Induction Time: 0.084 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 126 rules. (126 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp.out  filename: view2tmp.model  Process 2 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights (58)  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights (58)  Test: cognitive\_task2 > 64.940386 -> 2.8838573950624777 I: 0.0  Test: score\_test1 > 1034.941207 -> 2.7169554044003945 I: 0.0  Test: stress\_before\_test1 > 56.94478 -> 1.3882446470123846 I: 0.0  Test: iq > 123.401586 -> 1.147320775690556 I: 0.0  Test: iq > 120.343656 -> 0.8491900751358386 I: 0.0  Test: score\_test1 > 858.770383 -> 0.3538104940850185 I: 0.0  Test: practice\_task2 > 14.188938 -> 3.4749292656047146 I: 0.0  Test: iq > 85.92653 -> 2.4014490456246556 I: 0.0  Test: iq > 115.130279 -> 2.1559341201573865 I: 0.0  Test: stress\_before\_test1 > 45.626407 -> 1.7790371716607192 I: 0.0  Test: stress\_before\_test1 > 58.323311 -> 1.4707799051163084 I: 0.0  Test: stress\_before\_test1 > 32.201765 -> 1.7226607476436442 I: 0.0  Test: cognitive\_task2 > 36.718207 -> 1.6254942307324853 I: 0.0  Test: cognitive\_task2 > 44.925541 -> 1.5998112656657923 I: 0.0  Test: practice\_task2 > 6.192681 -> 1.5390950173695046 I: 0.0  Test: iq > 83.823716 -> 2.344783436666269 I: 0.0  Test: iq > 102.040557 -> 1.747897141135553 I: 0.0  Test: cognitive\_task2 > 45.65756 -> 2.285362876016592 I: 0.0  Test: stress\_before\_test1 > 54.15088 -> 1.8422107803810022 I: 0.0  Test: iq > 115.156511 -> 2.569325163253348 I: 0.0  Test: iq > 106.304567 -> 2.1548282778288135 I: 0.0  Test: iq > 113.787212 -> 1.3001876304395568 I: 0.0  Test: practice\_task2 > 11.893629 -> 1.2321357118981284 I: 0.0  Test: cognitive\_task2 > 50.334055 -> 0.7838166094679799 I: 0.0  Test: score\_test1 > 1237.951363 -> 1.8783755577966765 I: 0.0  Test: stress\_before\_test1 > 49.473075 -> 1.6181077592596491 I: 0.0  Test: iq > 115.500516 -> 1.0138741670224403 I: 0.0  Test: score\_test1 > 1203.651933 -> 0.3517616894589825 I: 0.0  Test: stress\_before\_test1 > 44.913995 -> 1.9372419791319597 I: 0.0  Test: cognitive\_task2 > 58.935809 -> 2.7769621867472694 I: 0.0  Test: iq > 107.222237 -> 1.414098277287816 I: 0.0  Test: stress\_before\_test1 > 32.963654 -> 1.2806929733269792 I: 0.0  Test: cognitive\_task2 > 48.428865 -> 1.272280357190694 I: 0.0  Test: cognitive\_task2 > 51.029219 -> 2.2533796031143236 I: 0.0  Test: cognitive\_task2 > 47.059469 -> 1.694153948734538 I: 0.0  Test: score\_test1 > 1177.825555 -> 1.0079016195274306 I: 0.0  Test: score\_test1 > 967.100466 -> 1.415951107140768 I: 0.0  Test: stress\_before\_test1 > 53.944185 -> 1.5151205739971894 I: 0.0  Test: stress\_before\_test1 > 35.808777 -> 0.4988213336791587 I: 0.0  Test: stress\_before\_test1 > 58.851147 -> 2.4502733809676176 I: 0.0  Test: stress\_before\_test1 > 37.164072 -> 1.1294873859497452 I: 0.0  Test: stress\_before\_test1 > 51.851224 -> 0.48837213112083966 I: 0.0  Test: stress\_before\_test1 > 53.756083 -> 2.8039614235959505 I: 0.0  Test: iq > 95.203618 -> 1.408428008274961 I: 0.0  Test: cognitive\_task2 > 38.256776 -> 0.8971037450348227 I: 0.0  Test: stress\_before\_test1 > 63.584511 -> 0.7909336574953834 I: 0.0  Test: stress\_before\_test1 > 54.965326 -> 0.7056063448162995 I: 0.0  Test: stress\_before\_test1 > 59.339384 -> 0.6953424830681083 I: 0.0  Test: stress\_before\_test1 > 61.460883 -> 0.039842283582618127 I: 0.0  Test: cognitive\_task2 > 40.535454 -> 1.0156617187188506 I: 0.0  Test: score\_test1 > 757.028809 -> 2.807701841376378 I: 0.0  Test: iq > 99.470157 -> 1.9858431343188698 I: 0.0  Test: cognitive\_task2 > 43.099641 -> 2.224136835508027 I: 0.0  Test: stress\_before\_test1 > 36.186858 -> 0.15863120513878093 I: 0.0  Test: stress\_before\_test1 > 36.680438 -> 2.013579872570446 I: 0.0  Test: iq > 83.916839 -> 2.771745047816628 I: 0.0  Test: practice\_task2 > 10.157313 -> 2.784255651024617 I: 0.0  Test: stress\_before\_test1 > 46.853504 -> 2.119298091649501 I: 0.0  Test: stress\_before\_test1 > 50.842664 -> 1.2718765467575985 I: 0.0  Test: iq > 82.510613 -> 0.8763814311772151 I: 0.0  Test: iq > 80.764962 -> 0.7704808716363145 I: 0.0  Induction Time: 0.075 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 122 rules. (122 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp1.out  filename: view1tmp1.model  Process 1 side 2 finished!  Adding new rules to set...  1  Adding new rules to set...  1  New rules cicle 1: 7  New rules cicle 2: 8  Using guided expansion with join procedure constrained!  max number of rules: 1003  0.9970089730807578% completed...  num redescriptions: 0  1.9940179461615155% completed...  num redescriptions: 0  2.991026919242273% completed...  num redescriptions: 0  3.988035892323031% completed...  num redescriptions: 0  4.985044865403789% completed...  num redescriptions: 0  5.982053838484546% completed...  num redescriptions: 0  6.979062811565304% completed...  num redescriptions: 0  7.976071784646062% completed...  num redescriptions: 0  8.97308075772682% completed...  num redescriptions: 0  9.970089730807578% completed...  num redescriptions: 0  10.967098703888336% completed...  num redescriptions: 0  11.964107676969093% completed...  num redescriptions: 0  12.961116650049851% completed...  num redescriptions: 0  13.958125623130607% completed...  num redescriptions: 0  14.955134596211368% completed...  num redescriptions: 0  15.952143569292124% completed...  num redescriptions: 0  16.94915254237288% completed...  num redescriptions: 0  17.94616151545364% completed...  num redescriptions: 0  18.943170488534395% completed...  num redescriptions: 0  19.940179461615156% completed...  num redescriptions: 0  20.937188434695912% completed...  num redescriptions: 0  21.934197407776672% completed...  num redescriptions: 0  22.93120638085743% completed...  num redescriptions: 0  23.928215353938185% completed...  num redescriptions: 0  24.925224327018945% completed...  num redescriptions: 0  25.922233300099702% completed...  num redescriptions: 0  26.919242273180462% completed...  num redescriptions: 0  27.916251246261215% completed...  num redescriptions: 0  28.913260219341975% completed...  num redescriptions: 0  29.910269192422735% completed...  num redescriptions: 0  30.907278165503488% completed...  num redescriptions: 0  31.904287138584248% completed...  num redescriptions: 0  32.901296111665005% completed...  num redescriptions: 0  33.89830508474576% completed...  num redescriptions: 0  34.89531405782652% completed...  num redescriptions: 0  35.89232303090728% completed...  num redescriptions: 0  36.88933200398804% completed...  num redescriptions: 0  37.88634097706879% completed...  num redescriptions: 0  38.88334995014955% completed...  num redescriptions: 0  39.88035892323031% completed...  num redescriptions: 0  40.87736789631107% completed...  num redescriptions: 0  41.874376869391824% completed...  num redescriptions: 0  42.871385842472584% completed...  num redescriptions: 0  43.868394815553344% completed...  num redescriptions: 0  44.8654037886341% completed...  num redescriptions: 0  45.86241276171486% completed...  num redescriptions: 0  46.85942173479562% completed...  num redescriptions: 0  47.85643070787637% completed...  num redescriptions: 0  48.85343968095713% completed...  num redescriptions: 0  49.85044865403789% completed...  num redescriptions: 0  50.847457627118644% completed...  num redescriptions: 0  51.844466600199404% completed...  num redescriptions: 0  52.841475573280164% completed...  num redescriptions: 0  53.838484546360924% completed...  num redescriptions: 0  54.835493519441684% completed...  num redescriptions: 0  55.83250249252243% completed...  num redescriptions: 0  56.82951146560319% completed...  num redescriptions: 0  57.82652043868395% completed...  num redescriptions: 0  58.82352941176471% completed...  num redescriptions: 0  59.82053838484547% completed...  num redescriptions: 0  60.817547357926216% completed...  num redescriptions: 0  61.814556331006976% completed...  num redescriptions: 0  62.811565304087736% completed...  num redescriptions: 0  63.808574277168496% completed...  num redescriptions: 0  64.80558325024926% completed...  num redescriptions: 0  65.80259222333001% completed...  num redescriptions: 0  66.79960119641076% completed...  num redescriptions: 0  67.79661016949152% completed...  num redescriptions: 0  68.79361914257228% completed...  num redescriptions: 0  69.79062811565304% completed...  num redescriptions: 0  70.7876370887338% completed...  num redescriptions: 0  71.78464606181456% completed...  num redescriptions: 0  72.78165503489531% completed...  num redescriptions: 0  73.77866400797608% completed...  num redescriptions: 0  74.77567298105683% completed...  num redescriptions: 0  75.77268195413758% completed...  num redescriptions: 0  76.76969092721835% completed...  num redescriptions: 0  77.7666999002991% completed...  num redescriptions: 0  78.76370887337985% completed...  num redescriptions: 0  79.76071784646062% completed...  num redescriptions: 0  80.75772681954138% completed...  num redescriptions: 0  81.75473579262214% completed...  num redescriptions: 0  82.7517447657029% completed...  num redescriptions: 0  83.74875373878365% completed...  num redescriptions: 0  84.7457627118644% completed...  num redescriptions: 0  85.74277168494517% completed...  num redescriptions: 0  86.73978065802592% completed...  num redescriptions: 0  87.73678963110669% completed...  num redescriptions: 0  88.73379860418744% completed...  num redescriptions: 0  89.7308075772682% completed...  num redescriptions: 0  90.72781655034895% completed...  num redescriptions: 0  91.72482552342971% completed...  num redescriptions: 0  92.72183449651047% completed...  num redescriptions: 0  93.71884346959123% completed...  num redescriptions: 0  94.71585244267199% completed...  num redescriptions: 0  95.71286141575274% completed...  num redescriptions: 0  96.7098703888335% completed...  num redescriptions: 0  97.70687936191426% completed...  num redescriptions: 0  98.70388833499501% completed...  num redescriptions: 0  99.70089730807578% completed...  num redescriptions: 0  100% completed!  Num times join: 0  New redescriptions: 1  Number of viewes: 1  Running index: 1  OOIndRR: 58  OOIndRR1: 77  Iteration: 2  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view1.s  Path: /usr/share/jars/view2.s  New rule index: 58  Rule size: 65  nARules: 7  New number of attributes: 17  New size: 16  l: 9  inc: 7  l+inc: 16  Old size: 9  New rule index: 77  Rule size: 85  nARules: 8  New number of attributes: 18  New size: 17  l: 9  inc: 8  l+inc: 17  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1,1,1,1], N=[31.034,76.014,51.02,31.034,7.99,4.217,4.018]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1,1,1,1], N=[1,1,1,1,1,1,1]  Test: practice\_task2 > 3.71087 -> 9.606208839909925 I: 0.0  Test: stress\_before\_test1 > 63.923561 -> 8.366197033708588 I: 0.0  Test: score\_test1 > 706.639352 -> 25.14296362015973 I: 0.0  Test: score\_test1 > 666.734537 -> 0.6273903864394331 I: 0.0  Test: practice\_task2 > 6.939097 -> 3.4830179030125805 I: 0.0  Test: stress\_before\_test1 > 36.371137 -> 2.502256642595519 I: 0.0  Test: score\_test1 > 1237.951363 -> 2.6198701667629507 I: 0.0  Test: practice\_task2 > 8.441734 -> 9.57981571102187 I: 0.0  Test: stress\_before\_test1 > 54.66957 -> 3.257603929589365 I: 0.0  Test: iq > 81.896689 -> 1.449691965070656 I: 0.0  Test: stress\_before\_test1 > 59.216253 -> 1.2017251054558997 I: 0.0  Test: score\_test1 > 882.70757 -> 2.8555641600028747 I: 0.0  Test: iq > 108.282008 -> 0.9517629956240232 I: 0.0  Test: iq > 111.729562 -> 1.7438140710488914 I: 0.0  Test: practice\_task2 > 11.806426 -> 0.42012749091926327 I: 0.0  Test: stress\_before\_test1 > 52.734595 -> 1.2089427785470832 I: 0.0  Test: score\_test1 > 1181.766205 -> 0.4181996049943568 I: 0.0  Test: score\_test1 > 1028.314874 -> 0.30809349334079317 I: 0.0  Test: cognitive\_task2 > 42.715178 -> 0.8977701679402958 I: 0.0  Test: cognitive\_task2 > 47.323673 -> 1.0691915364282707 I: 0.0  Test: score\_test1 > 1119.838338 -> 0.8336665665260314 I: 0.0  Test: score\_test1 > 1203.651933 -> 0.5768999766201586 I: 0.0  Test: stress\_before\_test1 > 44.742897 -> 0.42012749091926327 I: 0.0  Test: practice\_task2 > 8.967143 -> 2.016611956412464 I: 0.0  Test: iq > 98.489827 -> 0.5881784872869684 I: 0.0  Test: practice\_task2 > 10.371842 -> 1.1763569745739375 I: 0.0  Test: iq > 88.757725 -> 0.4411338654652265 I: 0.0  Test: score\_test1 > 909.636713 -> 3.341720026263163 I: 0.0  Test: stress\_before\_test1 > 46.216411 -> 0.7017612055152626 I: 0.0  Test: iq > 99.551293 -> 1.6756425710392824 I: 0.0  Test: score\_test1 > 770.139448 -> 1.4437108324316505 I: 0.0  Test: stress\_before\_test1 > 32.630223 -> 1.764535461860906 I: 0.0  Test: iq > 81.967425 -> 0.7133784836109086 I: 0.0  Test: practice\_task2 > 6.854164 -> 8.75139591873361 I: 0.0  Test: stress\_before\_test1 > 58.851147 -> 2.2628499928239254 I: 0.0  Test: stress\_before\_test1 > 60.397164 -> 0.5231442213146676 I: 0.0  Test: iq > 115.161739 -> 1.655174544962315 I: 0.0  Test: stress\_before\_test1 > 43.995828 -> 0.42885407003710563 I: 0.0  Test: score\_test1 > 1104.925722 -> 0.654750128745591 I: 0.0  Test: score\_test1 > 1083.392919 -> 2.3265317670809447 I: 0.0  Test: iq > 100.539293 -> 0.8962719806277618 I: 0.0  Induction Time: 0.046 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 82 rules. (82 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp.out  filename: view1tmp.model  Process 1 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1,1,1,1,1], N=[38.527,76.014,16.071,76.014,19.806,6.979,6.587,4.244]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1,1,1,1,1], N=[1,1,1,1,1,1,1,1]  Test: response\_time\_task2 > 2758.190154 -> 7.152622844712198 I: 0.0  Test: college\_math > 105.438347 -> 4.259551441387458 I: 0.0  Test: college\_math > 40.246879 -> 2.564862123970414 I: 0.0  Test: response\_time\_task2 > 1426.995599 -> 2.3304217314661813 I: 0.0  Test: response\_time\_task2 > 2613.218746 -> 1.5021171343402173 I: 0.0  Test: response\_time\_task2 > 2628.377054 -> 3.6632156120640342 I: 0.0  Test: response\_time\_task2 > 1998.326995 -> 1.1415342987096153 I: 0.0  Test: response\_time\_task2 > 2011.036928 -> 6.04563412389432 I: 0.0  Test: response\_time\_task2 > 2212.761134 -> 1.3048794047249501 I: 0.0  Test: college\_math > 81.703299 -> 0.8253159781173358 I: 0.0  Test: college\_math > 47.858723 -> 0.7221514808526694 I: 0.0  Test: response\_time\_task2 > 2227.495912 -> 0.7162563667232595 I: 0.0  Test: response\_time\_task2 > 2300.653697 -> 0.1237973967176006 I: 0.0  Test: response\_time\_task2 > 2373.433308 -> 0.17685342388228636 I: 0.0  Test: response\_time\_task2 > 2210.606339 -> 10.525372566768425 I: 0.0  Test: response\_time\_task2 > 2194.289677 -> 0.8846312307404229 I: 0.0  Test: college\_math > 84.412261 -> 0.43329088851160136 I: 0.0  Test: college\_math > 56.633078 -> 0.7162563667232599 I: 0.0  Test: response\_time\_task2 > 2084.527324 -> 0.13264006791171473 I: 0.0  Test: college\_math > 77.538161 -> 0.6946848038766902 I: 0.0  Test: college\_math > 100.171346 -> 0.433290888511602 I: 0.0  Test: response\_time\_task2 > 1576.676186 -> 0.2210667798528576 I: 0.0  Test: college\_math > 76.30314 -> 1.236230272347182 I: 0.0  Test: college\_math > 72.513148 -> 0.4441819944015606 I: 0.0  Test: response\_time\_task2 > 1681.716998 -> 0.1768534238822862 I: 0.0  Test: college\_math > 56.175443 -> 0.45320724051846906 I: 0.0  Test: college\_math > 60.48039 -> 0.7268096405266249 I: 0.0  Test: response\_time\_task2 > 1594.440447 -> 0.4042363974452259 I: 0.0  Test: response\_time\_task2 > 1845.176919 -> 0.3581281833616299 I: 0.0  Test: response\_time\_task2 > 1665.144716 -> 0.2829654782116581 I: 0.0  Test: response\_time\_task2 > 1416.339007 -> 1.2188899821452912 I: 0.0  Test: response\_time\_task2 > 1269.731396 -> 0.6094449910726456 I: 0.0  Test: response\_time\_task2 > 1155.552708 -> 0.1326400679117148 I: 0.0  Test: score\_math\_course2 > 19.683496 -> 5.655110403715653 I: 0.0  Test: score\_math\_course2 > 22.313455 -> 6.327005537762993 I: 0.0  Test: college\_math > 38.9139 -> 5.455098657036778 I: 0.0  Test: college\_math > 30.545628 -> 3.742010018017673 I: 0.0  Test: college\_math > 31.457076 -> 5.777319311599822 I: 0.0  Test: response\_time\_task2 > 1894.386652 -> 3.1101007511305028 I: 0.0  Test: response\_time\_task2 > 1506.766472 -> 0.5263938139800945 I: 0.0  Test: response\_time\_task2 > 2057.744975 -> 2.2045676052350185 I: 0.0  Test: college\_math > 29.007326 -> 0.17685342388228642 I: 0.0  Test: college\_math > 13.82313 -> 0.530560271646859 I: 0.0  Test: response\_time\_task2 > 1889.80251 -> 8.229953231626501 I: 0.0  Test: response\_time\_task2 > 1419.619277 -> 0.5263938139800945 I: 0.0  Test: score\_math\_course1 > 12.824352 -> 0.23875212224108688 I: 0.0  Test: score\_math\_course1 > 2.57234 -> 0.39792020373514425 I: 0.0  Induction Time: 0.048 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 94 rules. (94 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp1.out  filename: view2tmp1.model  Process 2 side 2 finished!  Adding new rules to set...  Adding new rules to set...  New rules cicle 1: 10  New rules cicle 2: 2  Using guided expansion with join procedure constrained!  max number of rules: 86  1.1627906976744187% completed...  num redescriptions: 0  2.3255813953488373% completed...  num redescriptions: 0  3.488372093023256% completed...  num redescriptions: 0  4.651162790697675% completed...  num redescriptions: 0  5.813953488372093% completed...  num redescriptions: 0  6.976744186046512% completed...  num redescriptions: 0  8.13953488372093% completed...  num redescriptions: 0  9.30232558139535% completed...  num redescriptions: 0  10.465116279069768% completed...  num redescriptions: 0  11.627906976744185% completed...  num redescriptions: 0  12.790697674418606% completed...  num redescriptions: 0  13.953488372093023% completed...  num redescriptions: 0  15.11627906976744% completed...  num redescriptions: 0  16.27906976744186% completed...  num redescriptions: 0  17.441860465116278% completed...  num redescriptions: 0  18.6046511627907% completed...  num redescriptions: 0  19.767441860465116% completed...  num redescriptions: 0  20.930232558139537% completed...  num redescriptions: 0  22.093023255813954% completed...  num redescriptions: 0  23.25581395348837% completed...  num redescriptions: 0  24.418604651162788% completed...  num redescriptions: 0  25.581395348837212% completed...  num redescriptions: 0  26.744186046511626% completed...  num redescriptions: 0  27.906976744186046% completed...  num redescriptions: 0  29.069767441860467% completed...  num redescriptions: 0  30.23255813953488% completed...  num redescriptions: 0  31.3953488372093% completed...  num redescriptions: 0  32.55813953488372% completed...  num redescriptions: 0  33.72093023255814% completed...  num redescriptions: 0  34.883720930232556% completed...  num redescriptions: 0  36.04651162790697% completed...  num redescriptions: 0  37.2093023255814% completed...  num redescriptions: 0  38.372093023255815% completed...  num redescriptions: 1  39.53488372093023% completed...  num redescriptions: 1  40.69767441860465% completed...  num redescriptions: 1  41.86046511627907% completed...  num redescriptions: 1  43.02325581395349% completed...  num redescriptions: 1  44.18604651162791% completed...  num redescriptions: 1  45.348837209302324% completed...  num redescriptions: 1  46.51162790697674% completed...  num redescriptions: 1  47.674418604651166% completed...  num redescriptions: 1  48.837209302325576% completed...  num redescriptions: 1  50.0% completed...  num redescriptions: 1  51.162790697674424% completed...  num redescriptions: 1  52.32558139534884% completed...  num redescriptions: 1  53.48837209302325% completed...  num redescriptions: 1  54.65116279069767% completed...  num redescriptions: 1  55.81395348837209% completed...  num redescriptions: 1  56.97674418604651% completed...  num redescriptions: 1  58.139534883720934% completed...  num redescriptions: 1  59.30232558139535% completed...  num redescriptions: 1  60.46511627906976% completed...  num redescriptions: 1  61.627906976744185% completed...  num redescriptions: 1  62.7906976744186% completed...  num redescriptions: 1  63.95348837209303% completed...  num redescriptions: 1  65.11627906976744% completed...  num redescriptions: 1  66.27906976744185% completed...  num redescriptions: 1  67.44186046511628% completed...  num redescriptions: 1  68.6046511627907% completed...  num redescriptions: 1  69.76744186046511% completed...  num redescriptions: 1  70.93023255813954% completed...  num redescriptions: 1  72.09302325581395% completed...  num redescriptions: 1  73.25581395348837% completed...  num redescriptions: 1  74.4186046511628% completed...  num redescriptions: 1  75.5813953488372% completed...  num redescriptions: 2  76.74418604651163% completed...  num redescriptions: 2  77.90697674418605% completed...  num redescriptions: 2  79.06976744186046% completed...  num redescriptions: 2  80.23255813953489% completed...  num redescriptions: 2  81.3953488372093% completed...  num redescriptions: 2  82.55813953488372% completed...  num redescriptions: 2  83.72093023255815% completed...  num redescriptions: 2  84.88372093023256% completed...  num redescriptions: 2  86.04651162790698% completed...  num redescriptions: 2  87.20930232558139% completed...  num redescriptions: 2  88.37209302325581% completed...  num redescriptions: 2  89.53488372093024% completed...  num redescriptions: 2  90.69767441860465% completed...  num redescriptions: 2  91.86046511627907% completed...  num redescriptions: 2  93.02325581395348% completed...  num redescriptions: 2  94.18604651162791% completed...  num redescriptions: 2  95.34883720930233% completed...  num redescriptions: 2  96.51162790697676% completed...  num redescriptions: 2  97.67441860465115% completed...  num redescriptions: 2  98.83720930232558% completed...  num redescriptions: 2  100.0% completed...  num redescriptions: 2  100% completed!  Num times join: 0  New redescriptions: 1  Number of viewes: 1  Running index: 2  OOIndRR: 65  OOIndRR1: 85  Iteration: 3  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view2.s  Path: /usr/share/jars/view1.s  New rule index: 85  Rule size: 95  nARules: 10  New number of attributes: 20  New size: 19  l: 9  inc: 10  l+inc: 19  Old size: 9  New rule index: 65  Rule size: 67  nARules: 2  New number of attributes: 12  New size: 11  l: 9  inc: 2  l+inc: 11  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1,1,1,1,1,1,1], N=[76.014,22.478,76.014,31.034,17.73,11.111,4.011,4.072,14.716,11.817]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1,1,1,1,1,1,1], N=[1,1,1,1,1,1,1,1,1,1]  Test: score\_math\_course1 > 97.744185 -> 15.405401220291935 I: 0.0  Test: score\_math\_course2 > 101.634809 -> 3.6915703510311744 I: 0.0  Test: college\_math > 63.651583 -> 3.129600703657559 I: 0.0  Test: score\_math\_course2 > 66.196287 -> 3.3614398396229177 I: 0.0  Test: response\_time\_task2 > 1998.326995 -> 3.185209846042291 I: 0.0  Test: response\_time\_task2 > 2615.498593 -> 2.3904866277205308 I: 0.0  Test: response\_time\_task2 > 2698.689685 -> 0.20209521058996177 I: 0.0  Test: college\_math > 97.364419 -> 1.797788128222729 I: 0.0  Test: response\_time\_task2 > 2314.53113 -> 0.2954306722689075 I: 0.0  Test: college\_math > 71.197165 -> 1.7786365333382346 I: 0.0  Test: college\_math > 72.273789 -> 0.9260624652932652 I: 0.0  Test: response\_time\_task2 > 2194.289677 -> 2.411625757780767 I: 0.0  Test: college\_math > 84.412261 -> 0.9423897093173434 I: 0.0  Test: college\_math > 70.359453 -> 1.566215375038904 I: 0.0  Test: college\_math > 65.668361 -> 2.6286001459330848 I: 0.0  Test: college\_math > 77.538161 -> 2.003053489517857 I: 0.0  Test: college\_math > 94.196887 -> 2.2256682067239684 I: 0.0  Test: college\_math > 96.079371 -> 3.071076454830737 I: 0.0  Test: score\_math\_course2 > 80.272883 -> 0.7525683524935429 I: 0.0  Test: score\_math\_course2 > 84.304124 -> 0.43113644925858485 I: 0.0  Test: score\_math\_course1 > 59.477552 -> 1.1036223329316708 I: 0.0  Test: response\_time\_task2 > 1445.255874 -> 0.6176217624205629 I: 0.0  Test: response\_time\_task2 > 1710.101716 -> 0.8351068453005466 I: 0.0  Test: college\_math > 66.276256 -> 3.6821115819601378 I: 0.0  Test: response\_time\_task2 > 2238.34526 -> 0.5732084500466836 I: 0.0  Test: score\_math\_course1 > 16.399815 -> 1.975462944118945 I: 0.0  Test: response\_time\_task2 > 1823.436832 -> 1.544180803309942 I: 0.0  Test: response\_time\_task2 > 2005.820182 -> 2.9340680559891297 I: 0.0  Test: response\_time\_task2 > 2057.744975 -> 4.061518666552914 I: 0.0  Test: score\_math\_course2 > 53.164659 -> 1.1755873307831415 I: 0.0  Test: score\_math\_course1 > 53.829476 -> 3.0701984275700718 I: 0.0  Test: college\_math > 46.997034 -> 2.292833800186741 I: 0.0  Test: score\_math\_course1 > 42.740064 -> 1.4490364839219136 I: 0.0  Test: response\_time\_task2 > 2142.860139 -> 1.9831577528410578 I: 0.0  Test: college\_math > 30.154978 -> 0.3074212501078988 I: 0.0  Test: college\_math > 42.641878 -> 0.38427656263487364 I: 0.0  Test: response\_time\_task2 > 2349.572031 -> 0.26946028078661555 I: 0.0  Test: response\_time\_task2 > 2018.867121 -> 5.819568456491337 I: 0.0  Test: score\_math\_course1 > 42.5306 -> 1.3287603146448745 I: 0.0  Test: college\_math > 38.9139 -> 1.4358526031870529 I: 0.0  Test: response\_time\_task2 > 1853.242801 -> 0.6456652859530556 I: 0.0  Test: response\_time\_task2 > 1905.223304 -> 0.9693640855419345 I: 0.0  Test: college\_math > 46.15751 -> 0.3668841558853575 I: 0.0  Test: college\_math > 48.774139 -> 0.3952558929958697 I: 0.0  Test: response\_time\_task2 > 1607.67597 -> 0.24251425270795396 I: 0.0  Test: score\_math\_course1 > 16.1271 -> 2.9624579122379453 I: 0.0  Test: college\_math > 11.617423 -> 0.6706342914537924 I: 0.0  Test: response\_time\_task2 > 1443.470034 -> 0.2171945701357466 I: 0.0  Test: college\_math > 10.895057 -> 0.543013135044053 I: 0.0  Test: college\_math > -10.061457 -> 0.6009817388493861 I: 0.0  Test: response\_time\_task2 > 2366.607732 -> 0.26089413507218917 I: 0.0  Test: score\_math\_course2 > 8.528537 -> 0.24864088016269914 I: 0.0  Test: response\_time\_task2 > 1617.258555 -> 0.12034230700659657 I: 0.0  Induction Time: 0.047 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 106 rules. (106 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp.out  filename: view2tmp.model  Process 2 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1], N=[76.014,38.527]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1], N=[1,1]  Test: cognitive\_task2 > 68.256988 -> 8.219613935588598 I: 0.0  Test: score\_test1 > 1052.037379 -> 20.315497627141447 I: 0.0  Test: stress\_before\_test1 > 61.915842 -> 7.49143835616437 I: 0.0  Test: score\_test1 > 1245.589879 -> 3.417075457950091 I: 0.0  Test: score\_test1 > 1249.307879 -> 24.54448088009735 I: 0.0  Test: practice\_task2 > 14.333124 -> 2.2538527397261063 I: 0.0  Test: stress\_before\_test1 > 59.454975 -> 7.223886986301348 I: 0.0  Induction Time: 0.03 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 14 rules. (14 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp1.out  filename: view1tmp1.model  Process 1 side 2 finished!  Adding new rules to set...  1  Adding new rules to set...  New rules cicle 1: 5  New rules cicle 2: 4  Using guided expansion with join procedure constrained!  max number of rules: 58  1.7241379310344827% completed...  num redescriptions: 2  3.4482758620689653% completed...  num redescriptions: 2  5.172413793103448% completed...  num redescriptions: 2  6.896551724137931% completed...  num redescriptions: 2  8.620689655172415% completed...  num redescriptions: 2  10.344827586206897% completed...  num redescriptions: 2  12.068965517241379% completed...  num redescriptions: 2  13.793103448275861% completed...  num redescriptions: 2  15.517241379310345% completed...  num redescriptions: 2  17.24137931034483% completed...  num redescriptions: 2  18.96551724137931% completed...  num redescriptions: 2  20.689655172413794% completed...  num redescriptions: 2  22.413793103448278% completed...  num redescriptions: 2  24.137931034482758% completed...  num redescriptions: 2  25.862068965517242% completed...  num redescriptions: 2  27.586206896551722% completed...  num redescriptions: 2  29.310344827586203% completed...  num redescriptions: 2  31.03448275862069% completed...  num redescriptions: 2  32.758620689655174% completed...  num redescriptions: 2  34.48275862068966% completed...  num redescriptions: 2  36.206896551724135% completed...  num redescriptions: 2  37.93103448275862% completed...  num redescriptions: 2  39.6551724137931% completed...  num redescriptions: 2  41.37931034482759% completed...  num redescriptions: 2  43.103448275862064% completed...  num redescriptions: 2  44.827586206896555% completed...  num redescriptions: 2  46.55172413793103% completed...  num redescriptions: 2  48.275862068965516% completed...  num redescriptions: 2  50.0% completed...  num redescriptions: 2  51.724137931034484% completed...  num redescriptions: 2  53.44827586206896% completed...  num redescriptions: 2  55.172413793103445% completed...  num redescriptions: 2  56.896551724137936% completed...  num redescriptions: 2  58.620689655172406% completed...  num redescriptions: 2  60.3448275862069% completed...  num redescriptions: 3  62.06896551724138% completed...  num redescriptions: 3  63.793103448275865% completed...  num redescriptions: 3  65.51724137931035% completed...  num redescriptions: 3  67.24137931034483% completed...  num redescriptions: 3  68.96551724137932% completed...  num redescriptions: 3  70.6896551724138% completed...  num redescriptions: 3  72.41379310344827% completed...  num redescriptions: 3  74.13793103448276% completed...  num redescriptions: 3  75.86206896551724% completed...  num redescriptions: 3  77.58620689655173% completed...  num redescriptions: 3  79.3103448275862% completed...  num redescriptions: 3  81.03448275862068% completed...  num redescriptions: 3  82.75862068965517% completed...  num redescriptions: 3  84.48275862068965% completed...  num redescriptions: 3  86.20689655172413% completed...  num redescriptions: 3  87.93103448275862% completed...  num redescriptions: 3  89.65517241379311% completed...  num redescriptions: 3  91.37931034482759% completed...  num redescriptions: 3  93.10344827586206% completed...  num redescriptions: 3  94.82758620689656% completed...  num redescriptions: 3  96.55172413793103% completed...  num redescriptions: 3  98.27586206896551% completed...  num redescriptions: 3  100.0% completed...  num redescriptions: 3  100% completed!  Num times join: 1  New redescriptions: 1  Number of viewes: 1  Running index: 3  OOIndRR: 67  OOIndRR1: 95  Iteration: 4  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view1.s  Path: /usr/share/jars/view2.s  New rule index: 67  Rule size: 72  nARules: 5  New number of attributes: 15  New size: 14  l: 9  inc: 5  l+inc: 14  Old size: 9  New rule index: 95  Rule size: 99  nARules: 4  New number of attributes: 14  New size: 13  l: 9  inc: 4  l+inc: 13  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1,1], N=[51.02,51.02,51.02,26.042,4.058]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1,1], N=[1,1,1,1,1]  Test: stress\_before\_test1 > 63.923561 -> 13.367326087641459 I: 0.0  Test: score\_test1 > 706.639352 -> 36.78052389787086 I: 0.0  Test: iq > 88.85948 -> 0.974025974025974 I: 0.0  Test: score\_test1 > 1291.806003 -> 8.979801345582871 I: 0.0  Test: practice\_task2 > 3.71087 -> 7.174245745258361 I: 0.0  Test: score\_test1 > 1237.951363 -> 1.6461619271901071 I: 0.0  Test: score\_test1 > 1246.472479 -> 6.638289785611212 I: 0.0  Test: stress\_before\_test1 > 54.589658 -> 1.2523191094619666 I: 0.0  Test: stress\_before\_test1 > 46.853504 -> 0.2898886827458257 I: 0.0  Test: stress\_before\_test1 > 32.630223 -> 1.583337404881945 I: 0.0  Test: cognitive\_task2 > 40.06381 -> 1.0633981819046596 I: 0.0  Test: stress\_before\_test1 > 46.286879 -> 1.476675380896154 I: 0.0  Test: cognitive\_task2 > 50.584289 -> 0.9055653942017603 I: 0.0  Test: iq > 108.282008 -> 1.1431277056277036 I: 0.0  Test: practice\_task2 > 6.224953 -> 0.4873689906584664 I: 0.0  Test: score\_test1 > 1060.820964 -> 0.759474443684969 I: 0.0  Test: score\_test1 > 882.70757 -> 1.1544011544011543 I: 0.0  Test: score\_test1 > 1034.941207 -> 0.24350649350649356 I: 0.0  Test: stress\_before\_test1 > 58.851147 -> 0.4329004329004329 I: 0.0  Test: score\_test1 > 1011.560442 -> 0.27056277056277056 I: 0.0  Test: stress\_before\_test1 > 62.040961 -> 0.47630321067821235 I: 0.0  Test: score\_test1 > 864.292854 -> 0.8116883116883116 I: 0.0  Test: score\_test1 > 1201.412827 -> 0.2857819264069259 I: 0.0  Test: cognitive\_task2 > 40.535454 -> 0.3266079158936297 I: 0.0  Test: cognitive\_task2 > 48.043076 -> 0.17393320964749615 I: 0.0  Test: stress\_before\_test1 > 58.437233 -> 0.20292207792207795 I: 0.0  Test: score\_test1 > 689.604194 -> 1.8707482993197289 I: 0.0  Test: cognitive\_task2 > 47.903391 -> 1.395330859616573 I: 0.0  Test: cognitive\_task2 > 51.899142 -> 1.087082560296846 I: 0.0  Test: practice\_task2 > 8.607563 -> 0.9131493506493505 I: 0.0  Test: stress\_before\_test1 > 39.509503 -> 0.20292207792207795 I: 0.0  Test: stress\_before\_test1 > 37.269505 -> 0.46382189239332083 I: 0.0  Test: stress\_before\_test1 > 42.471609 -> 1.5151515151515154 I: 0.0  Test: stress\_before\_test1 > 41.353426 -> 0.24350649350649334 I: 0.0  Test: stress\_before\_test1 > 59.276836 -> 7.247183282085885 I: 0.0  Test: score\_test1 > 1106.232239 -> 1.0494555949101398 I: 0.0  Test: score\_test1 > 770.139448 -> 0.31565656565656597 I: 0.0  Induction Time: 0.043 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 74 rules. (74 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp.out  filename: view1tmp.model  Process 1 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1], N=[22.478,11.817,7.2,5.828]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1], N=[1,1,1,1]  Test: score\_math\_course1 > 94.379674 -> 6.014234487378985 I: 0.0  Test: response\_time\_task2 > 1782.933049 -> 4.376045467137903 I: 0.0  Test: response\_time\_task2 > 1998.326995 -> 4.794543765058471 I: 0.0  Test: response\_time\_task2 > 1848.471068 -> 3.4707467536381387 I: 0.0  Test: response\_time\_task2 > 1864.595548 -> 9.040622963922871 I: 0.0  Test: response\_time\_task2 > 2057.744975 -> 4.558312883519719 I: 0.0  Test: response\_time\_task2 > 2600.690718 -> 2.2995616415669957 I: 0.0  Test: response\_time\_task2 > 2613.218746 -> 8.17182164735641 I: 0.0  Test: response\_time\_task2 > 2628.377054 -> 1.4296888296888284 I: 0.0  Test: response\_time\_task2 > 2753.508938 -> 1.0856254856254846 I: 0.0  Test: college\_math > 58.381529 -> 2.0639535865204266 I: 0.0  Test: score\_math\_course1 > 53.829476 -> 2.7740588215391604 I: 0.0  Test: response\_time\_task2 > 2382.308407 -> 1.052595468805924 I: 0.0  Test: score\_math\_course2 > 70.82291 -> 1.1091398534938461 I: 0.0  Test: response\_time\_task2 > 2219.213272 -> 1.552795794891383 I: 0.0  Test: score\_math\_course1 > 51.53185 -> 6.482168844227668 I: 0.0  Test: response\_time\_task2 > 2300.653697 -> 0.7214236812138921 I: 0.0  Test: response\_time\_task2 > 2404.896683 -> 2.295001408847561 I: 0.0  Test: response\_time\_task2 > 2373.433308 -> 1.7943767343767343 I: 0.0  Test: response\_time\_task2 > 2194.076018 -> 0.0728438228438213 I: 0.0  Test: response\_time\_task2 > 2180.825334 -> 0.5827505827505833 I: 0.0  Test: score\_math\_course1 > 25.044504 -> 17.330830437145977 I: 0.0  Test: college\_math > 38.9139 -> 3.0711883127376822 I: 0.0  Test: response\_time\_task2 > 1994.760736 -> 0.8453578167863895 I: 0.0  Test: response\_time\_task2 > 2011.036928 -> 2.958752358752357 I: 0.0  Test: score\_math\_course1 > 29.319077 -> 6.314262575659635 I: 0.0  Test: response\_time\_task2 > 1155.552708 -> 4.276148840601328 I: 0.0  Test: score\_math\_course1 > 78.29103 -> 0.6002569205198274 I: 0.0  Test: college\_math > 73.614991 -> 2.1379598478863198 I: 0.0  Test: college\_math > 94.196887 -> 0.5203130203130198 I: 0.0  Test: response\_time\_task2 > 1416.663477 -> 0.3364921602172153 I: 0.0  Test: college\_math > 32.663332 -> 0.40615949706858867 I: 0.0  Test: response\_time\_task2 > 1617.258555 -> 0.874125874125874 I: 0.0  Test: response\_time\_task2 > 1690.616142 -> 1.4568764568764572 I: 0.0  Test: score\_math\_course1 > 52.977409 -> 2.185314685314686 I: 0.0  Induction Time: 0.043 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 70 rules. (70 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp1.out  filename: view2tmp1.model  Process 2 side 2 finished!  Adding new rules to set...  Adding new rules to set...  New rules cicle 1: 8  New rules cicle 2: 3  Using guided expansion with join procedure constrained!  max number of rules: 52  1.9230769230769231% completed...  num redescriptions: 3  3.8461538461538463% completed...  num redescriptions: 3  5.769230769230769% completed...  num redescriptions: 3  7.6923076923076925% completed...  num redescriptions: 3  9.615384615384617% completed...  num redescriptions: 3  11.538461538461538% completed...  num redescriptions: 3  13.461538461538462% completed...  num redescriptions: 3  15.384615384615385% completed...  num redescriptions: 3  17.307692307692307% completed...  num redescriptions: 3  19.230769230769234% completed...  num redescriptions: 3  21.153846153846153% completed...  num redescriptions: 3  23.076923076923077% completed...  num redescriptions: 3  25.0% completed...  num redescriptions: 3  26.923076923076923% completed...  num redescriptions: 3  28.846153846153843% completed...  num redescriptions: 3  30.76923076923077% completed...  num redescriptions: 3  32.69230769230769% completed...  num redescriptions: 3  34.61538461538461% completed...  num redescriptions: 3  36.53846153846153% completed...  num redescriptions: 3  38.46153846153847% completed...  num redescriptions: 3  40.38461538461539% completed...  num redescriptions: 3  42.30769230769231% completed...  num redescriptions: 3  44.230769230769226% completed...  num redescriptions: 3  46.15384615384615% completed...  num redescriptions: 3  48.07692307692308% completed...  num redescriptions: 3  50.0% completed...  num redescriptions: 3  51.92307692307693% completed...  num redescriptions: 3  53.84615384615385% completed...  num redescriptions: 3  55.769230769230774% completed...  num redescriptions: 3  57.692307692307686% completed...  num redescriptions: 3  59.61538461538461% completed...  num redescriptions: 3  61.53846153846154% completed...  num redescriptions: 3  63.46153846153846% completed...  num redescriptions: 3  65.38461538461539% completed...  num redescriptions: 3  67.3076923076923% completed...  num redescriptions: 3  69.23076923076923% completed...  num redescriptions: 3  71.15384615384616% completed...  num redescriptions: 3  73.07692307692307% completed...  num redescriptions: 3  75.0% completed...  num redescriptions: 3  76.92307692307693% completed...  num redescriptions: 3  78.84615384615384% completed...  num redescriptions: 3  80.76923076923077% completed...  num redescriptions: 3  82.6923076923077% completed...  num redescriptions: 3  84.61538461538461% completed...  num redescriptions: 3  86.53846153846155% completed...  num redescriptions: 3  88.46153846153845% completed...  num redescriptions: 3  90.38461538461539% completed...  num redescriptions: 3  92.3076923076923% completed...  num redescriptions: 3  94.23076923076923% completed...  num redescriptions: 3  96.15384615384616% completed...  num redescriptions: 3  98.07692307692307% completed...  num redescriptions: 3  100.0% completed...  num redescriptions: 3  100% completed!  Num times join: 2  New redescriptions: 1  Number of viewes: 1  Running index: 4  OOIndRR: 72  OOIndRR1: 99  Iteration: 5  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view2.s  Path: /usr/share/jars/view1.s  New rule index: 99  Rule size: 107  nARules: 8  New number of attributes: 18  New size: 17  l: 9  inc: 8  l+inc: 17  Old size: 9  New rule index: 72  Rule size: 75  nARules: 3  New number of attributes: 13  New size: 12  l: 9  inc: 3  l+inc: 12  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1,1,1,1,1], N=[22.478,76.014,31.034,51.02,22.478,16.071,13.587,4.96]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1,1,1,1,1], N=[1,1,1,1,1,1,1,1]  Test: score\_math\_course1 > 97.744185 -> 29.79068292856371 I: 0.0  Test: score\_math\_course1 > 42.97013 -> 3.4363907357493986 I: 0.0  Test: score\_math\_course2 > 49.535972 -> 26.995701727461693 I: 0.0  Test: response\_time\_task2 > 1155.552708 -> 1.5065741752586206 I: 0.0  Test: score\_math\_course2 > 101.521638 -> 1.4604428144527049 I: 0.0  Test: response\_time\_task2 > 2194.289677 -> 0.42459239130434756 I: 0.0  Test: college\_math > 95.98867 -> 1.592459422281948 I: 0.0  Test: college\_math > 98.839263 -> 7.343827545473369 I: 0.0  Test: response\_time\_task2 > 2314.53113 -> 0.465029761904762 I: 0.0  Test: response\_time\_task2 > 1782.933049 -> 0.15500992063492064 I: 0.0  Test: score\_math\_course2 > 66.196287 -> 1.985141407140354 I: 0.0  Test: college\_math > 77.538161 -> 0.4859841498539703 I: 0.0  Test: response\_time\_task2 > 2023.826994 -> 0.28282511835143365 I: 0.0  Test: response\_time\_task2 > 2409.103217 -> 0.4133597883597885 I: 0.0  Test: college\_math > 72.677626 -> 1.0700074782999613 I: 0.0  Test: score\_math\_course2 > 80.272883 -> 0.8370535714285717 I: 0.0  Test: response\_time\_task2 > 1780.997292 -> 0.15500992063492064 I: 0.0  Test: college\_math > 70.927333 -> 0.17904889228418663 I: 0.0  Test: college\_math > 67.471197 -> 0.8016674683341347 I: 0.0  Test: response\_time\_task2 > 1545.301482 -> 0.24112654320987686 I: 0.0  Test: college\_math > 66.276256 -> 8.035406873871175 I: 0.0  Test: score\_math\_course2 > 60.886824 -> 2.1032682465043706 I: 0.0  Test: response\_time\_task2 > 2011.036928 -> 3.982464719674235 I: 0.0  Test: response\_time\_task2 > 2294.638589 -> 0.843942901234568 I: 0.0  Test: response\_time\_task2 > 2373.433308 -> 0.2066798941798943 I: 0.0  Test: response\_time\_task2 > 2309.361431 -> 0.6200396825396827 I: 0.0  Test: college\_math > 40.611769 -> 0.2583498677248674 I: 0.0  Test: response\_time\_task2 > 2194.076018 -> 0.3004846539709636 I: 0.0  Test: response\_time\_task2 > 2018.867121 -> 0.9956505147025698 I: 0.0  Test: response\_time\_task2 > 2061.037307 -> 0.9254381100266182 I: 0.0  Test: response\_time\_task2 > 2180.825334 -> 0.7440476190476192 I: 0.0  Test: score\_math\_course2 > 38.43055 -> 0.5175331221198163 I: 0.0  Test: response\_time\_task2 > 1665.144716 -> 0.6975446428571431 I: 0.0  Test: response\_time\_task2 > 1853.242801 -> 0.15500992063492064 I: 0.0  Induction Time: 0.042 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 68 rules. (68 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp.out  filename: view2tmp.model  Process 2 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1], N=[31.034,4.191,5.828]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1], N=[1,1,1]  Test: stress\_before\_test1 > 63.923561 -> 4.935881716815572 I: 0.0  Test: score\_test1 > 706.639352 -> 16.166498424158945 I: 0.0  Test: stress\_before\_test1 > 65.048723 -> 0.7690050062931415 I: 0.0  Test: cognitive\_task2 > 63.999045 -> 3.2643760029699678 I: 0.0  Test: practice\_task2 > 10.576348 -> 0.956308648616341 I: 0.0  Test: score\_test1 > 858.770383 -> 2.331002331002331 I: 0.0  Test: practice\_task2 > 14.188938 -> 2.5130598909818502 I: 0.0  Test: iq > 85.92653 -> 1.0189120358611876 I: 0.0  Test: stress\_before\_test1 > 45.626407 -> 0.838144905941516 I: 0.0  Test: practice\_task2 > 13.52544 -> 4.104369527680589 I: 0.0  Test: practice\_task2 > 13.306054 -> 2.609136758629802 I: 0.0  Test: stress\_before\_test1 > 48.964431 -> 3.983115073120917 I: 0.0  Test: iq > 115.500516 -> 2.371328653369204 I: 0.0  Test: score\_test1 > 1029.16402 -> 4.452546825428182 I: 0.0  Test: score\_test1 > 1134.19714 -> 2.8731738489149876 I: 0.0  Test: practice\_task2 > 6.47254 -> 1.7746980901753773 I: 0.0  Test: practice\_task2 > 8.441734 -> 2.2803873136240966 I: 0.0  Test: stress\_before\_test1 > 54.66957 -> 1.5869279506937968 I: 0.0  Test: stress\_before\_test1 > 50.420656 -> 1.2820307294028979 I: 0.0  Test: stress\_before\_test1 > 54.503258 -> 0.49889577734614055 I: 0.0  Test: score\_test1 > 1283.585547 -> 1.3057799074748226 I: 0.0  Test: score\_test1 > 1175.579396 -> 1.30977779282864 I: 0.0  Test: stress\_before\_test1 > 45.654942 -> 0.5827505827505829 I: 0.0  Test: score\_test1 > 1191.423367 -> 3.522520728832828 I: 0.0  Test: iq > 90.814573 -> 3.3783577881721243 I: 0.0  Test: stress\_before\_test1 > 59.700898 -> 2.712115854860933 I: 0.0  Test: stress\_before\_test1 > 60.397164 -> 4.452235374210828 I: 0.0  Test: cognitive\_task2 > 42.022984 -> 1.4551126839262432 I: 0.0  Test: stress\_before\_test1 > 62.473714 -> 0.4656360588563978 I: 0.0  Test: stress\_before\_test1 > 37.269505 -> 2.70134783186019 I: 0.0  Test: cognitive\_task2 > 46.584235 -> 2.9066686083214144 I: 0.0  Test: iq > 107.222237 -> 3.610012084588355 I: 0.0  Test: cognitive\_task2 > 51.899142 -> 2.226273412714091 I: 0.0  Test: practice\_task2 > 9.196324 -> 1.490035388340473 I: 0.0  Test: cognitive\_task2 > 48.428865 -> 1.8625442354255914 I: 0.0  Test: stress\_before\_test1 > 45.353574 -> 0.9821695657046736 I: 0.0  Test: stress\_before\_test1 > 41.353426 -> 2.291728986644241 I: 0.0  Test: score\_test1 > 725.857491 -> 1.8109916717664896 I: 0.0  Test: practice\_task2 > 7.900248 -> 1.0643109916717663 I: 0.0  Test: stress\_before\_test1 > 32.608489 -> 0.5238405662134474 I: 0.0  Test: iq > 77.272879 -> 3.401905971440957 I: 0.0  Test: cognitive\_task2 > 41.458649 -> 2.432465003086472 I: 0.0  Test: stress\_before\_test1 > 47.316658 -> 0.7770007770007763 I: 0.0  Test: stress\_before\_test1 > 34.896853 -> 1.0360010360010359 I: 0.0  Test: practice\_task2 > 7.252777 -> 2.5472800896529706 I: 0.0  Test: practice\_task2 > 7.574182 -> 1.209556294302057 I: 0.0  Test: stress\_before\_test1 > 39.904398 -> 0.834852529767784 I: 0.0  Test: practice\_task2 > 6.462204 -> 2.080977716570936 I: 0.0  Test: stress\_before\_test1 > 54.965326 -> 0.419072452970758 I: 0.0  Induction Time: 0.042 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 98 rules. (98 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp1.out  filename: view1tmp1.model  Process 1 side 2 finished!  Adding new rules to set...  Adding new rules to set...  New rules cicle 1: 2  New rules cicle 2: 4  Using guided expansion with join procedure constrained!  max number of rules: 28  3.571428571428571% completed...  num redescriptions: 3  7.142857142857142% completed...  num redescriptions: 3  10.714285714285714% completed...  num redescriptions: 3  14.285714285714285% completed...  num redescriptions: 3  17.857142857142858% completed...  num redescriptions: 3  21.428571428571427% completed...  num redescriptions: 3  25.0% completed...  num redescriptions: 3  28.57142857142857% completed...  num redescriptions: 3  32.142857142857146% completed...  num redescriptions: 3  35.714285714285715% completed...  num redescriptions: 3  39.285714285714285% completed...  num redescriptions: 3  42.857142857142854% completed...  num redescriptions: 3  46.42857142857143% completed...  num redescriptions: 3  50.0% completed...  num redescriptions: 3  53.57142857142857% completed...  num redescriptions: 3  57.14285714285714% completed...  num redescriptions: 3  60.71428571428571% completed...  num redescriptions: 3  64.28571428571429% completed...  num redescriptions: 3  67.85714285714286% completed...  num redescriptions: 3  71.42857142857143% completed...  num redescriptions: 3  75.0% completed...  num redescriptions: 3  78.57142857142857% completed...  num redescriptions: 3  82.14285714285714% completed...  num redescriptions: 3  85.71428571428571% completed...  num redescriptions: 3  89.28571428571429% completed...  num redescriptions: 3  92.85714285714286% completed...  num redescriptions: 3  96.42857142857143% completed...  num redescriptions: 3  100.0% completed...  num redescriptions: 3  100% completed!  Num times join: 2  New redescriptions: 1  Number of viewes: 1  Running index: 5  OOIndRR: 75  OOIndRR1: 107  Iteration: 6  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view1.s  Path: /usr/share/jars/view2.s  New rule index: 75  Rule size: 77  nARules: 2  New number of attributes: 12  New size: 11  l: 9  inc: 2  l+inc: 11  Old size: 9  New rule index: 107  Rule size: 111  nARules: 4  New number of attributes: 14  New size: 13  l: 9  inc: 4  l+inc: 13  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1], N=[4.058,4.006]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1], N=[1,1]  Test: stress\_before\_test1 > 56.560735 -> 8.907131462193092 I: 0.0  Test: iq > 85.227777 -> 4.795685482594386 I: 0.0  Test: cognitive\_task2 > 63.476056 -> 3.587763535276011 I: 0.0  Test: iq > 122.21947 -> 1.5121597152847155 I: 0.0  Test: stress\_before\_test1 > 62.040961 -> 3.9102311829584586 I: 0.0  Test: cognitive\_task2 > 59.458032 -> 3.5384241705264436 I: 0.0  Test: iq > 88.85948 -> 1.5121597152847155 I: 0.0  Test: stress\_before\_test1 > 59.588566 -> 2.1235528540723294 I: 0.0  Test: cognitive\_task2 > 40.06381 -> 2.8988868274582558 I: 0.0  Test: cognitive\_task2 > 50.584289 -> 3.2508001258001276 I: 0.0  Test: score\_test1 > 1067.982413 -> 3.3473470973470967 I: 0.0  Test: stress\_before\_test1 > 58.226544 -> 2.3356273356273354 I: 0.0  Test: stress\_before\_test1 > 58.437233 -> 3.503441003441003 I: 0.0  Test: cognitive\_task2 > 51.836614 -> 6.668390856139979 I: 0.0  Test: score\_test1 > 674.285633 -> 2.7593933843933875 I: 0.0  Test: practice\_task2 > 5.661836 -> 2.9217106422988763 I: 0.0  Test: stress\_before\_test1 > 49.684751 -> 5.0598122539967445 I: 0.0  Test: stress\_before\_test1 > 53.643012 -> 1.3441419691419694 I: 0.0  Test: iq > 114.607596 -> 3.170953099930374 I: 0.0  Test: stress\_before\_test1 > 34.676781 -> 0.7154304029304022 I: 0.0  Test: iq > 107.334707 -> 2.530022061272061 I: 0.0  Test: practice\_task2 > 10.371842 -> 5.026381446835998 I: 0.0  Test: iq > 88.757725 -> 3.3194359336966848 I: 0.0  Test: cognitive\_task2 > 39.41501 -> 2.890890674981578 I: 0.0  Test: iq > 87.56499 -> 5.955582878659802 I: 0.0  Test: stress\_before\_test1 > 44.952174 -> 2.419455544455543 I: 0.0  Test: cognitive\_task2 > 41.009352 -> 4.032425907425907 I: 0.0  Test: practice\_task2 > 7.943652 -> 6.420770522661279 I: 0.0  Test: cognitive\_task2 > 41.756111 -> 3.017943045516576 I: 0.0  Test: iq > 94.673049 -> 4.208031551781552 I: 0.0  Test: stress\_before\_test1 > 37.632475 -> 1.3441419691419694 I: 0.0  Test: stress\_before\_test1 > 50.842664 -> 1.6736735486735475 I: 0.0  Test: iq > 77.913366 -> 4.528284215784211 I: 0.0  Test: iq > 101.052443 -> 4.672039270253556 I: 0.0  Test: iq > 102.236472 -> 2.8855073497930643 I: 0.0  Test: stress\_before\_test1 > 37.164072 -> 1.3389388389388381 I: 0.0  Test: practice\_task2 > 6.462204 -> 3.0360264735264737 I: 0.0  Induction Time: 0.042 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 74 rules. (74 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp.out  filename: view1tmp.model  Process 1 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1], N=[12.633,8.654,4.762,4.001]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1], N=[1,1,1,1]  Test: score\_math\_course2 > 17.974501 -> 4.85331632260386 I: 0.0  Test: college\_math > 40.246879 -> 6.846509763154131 I: 0.0  Test: score\_math\_course1 > 97.744185 -> 3.3228578064408794 I: 0.0  Test: college\_math > 47.858723 -> 2.2709399857437376 I: 0.0  Test: score\_math\_course1 > 79.642274 -> 3.67754760559113 I: 0.0  Test: response\_time\_task2 > 1426.995599 -> 2.5808190299948635 I: 0.0  Test: score\_math\_course1 > 88.273408 -> 1.330777376608598 I: 0.0  Test: score\_math\_course1 > 90.014277 -> 2.083444464201043 I: 0.0  Test: college\_math > 90.495318 -> 1.4882804562080878 I: 0.0  Test: response\_time\_task2 > 1929.045879 -> 0.33339260312944496 I: 0.0  Test: college\_math > 94.196887 -> 1.0112642328925228 I: 0.0  Test: response\_time\_task2 > 1923.771963 -> 2.206394689947321 I: 0.0  Test: college\_math > 77.512249 -> 3.9845078696884357 I: 0.0  Test: college\_math > 84.068846 -> 5.489206015101617 I: 0.0  Test: response\_time\_task2 > 1848.471068 -> 0.25004445234708395 I: 0.0  Test: score\_math\_course1 > 71.60712 -> 3.820125355373148 I: 0.0  Test: response\_time\_task2 > 2007.024838 -> 0.789584503088153 I: 0.0  Test: score\_math\_course2 > 80.272883 -> 2.1004791237367613 I: 0.0  Test: response\_time\_task2 > 2011.036928 -> 1.8662078846071992 I: 0.0  Test: response\_time\_task2 > 2212.761134 -> 2.7753236000587957 I: 0.0  Test: college\_math > 53.285152 -> 0.7786781142044306 I: 0.0  Test: response\_time\_task2 > 2408.41778 -> 1.2977968570073832 I: 0.0  Test: response\_time\_task2 > 2210.606339 -> 4.5548729999363875 I: 0.0  Test: college\_math > 56.633078 -> 2.3492212390238727 I: 0.0  Test: college\_math > 66.030062 -> 1.3589435299961614 I: 0.0  Test: response\_time\_task2 > 2084.527324 -> 0.5408653846153848 I: 0.0  Test: response\_time\_task2 > 1717.244774 -> 1.0407930884904584 I: 0.0  Test: response\_time\_task2 > 1836.423645 -> 0.4286476325950008 I: 0.0  Test: response\_time\_task2 > 1864.595548 -> 1.0001778093883358 I: 0.0  Test: score\_math\_course1 > 69.431532 -> 0.6165491691807485 I: 0.0  Test: response\_time\_task2 > 1688.513517 -> 0.5191187428029531 I: 0.0  Test: response\_time\_task2 > 1545.301482 -> 1.5573562284088598 I: 0.0  Test: college\_math > 58.894617 -> 0.9349739777371358 I: 0.0  Test: college\_math > 42.485564 -> 1.7606468675547635 I: 0.0  Test: response\_time\_task2 > 1823.436832 -> 0.15911919694814347 I: 0.0  Test: response\_time\_task2 > 1416.339007 -> 0.25004445234708395 I: 0.0  Test: college\_math > 41.499814 -> 2.731519384479911 I: 0.0  Test: response\_time\_task2 > 1894.386652 -> 10.425121538500335 I: 0.0  Test: response\_time\_task2 > 2007.347339 -> 7.7942983400628485 I: 0.0  Test: score\_math\_course2 > 44.412582 -> 4.572339160434623 I: 0.0  Test: score\_math\_course2 > 25.561852 -> 4.7666712128819775 I: 0.0  Test: response\_time\_task2 > 2194.076018 -> 1.3396183508965465 I: 0.0  Test: response\_time\_task2 > 2395.675533 -> 0.30005334281650053 I: 0.0  Test: score\_math\_course1 > 17.050488 -> 5.869463050780281 I: 0.0  Test: college\_math > 36.632244 -> 2.1707585804301126 I: 0.0  Test: score\_math\_course2 > 25.945663 -> 2.502105380394854 I: 0.0  Test: response\_time\_task2 > 1363.214849 -> 0.3572063604958339 I: 0.0  Test: score\_math\_course1 > 16.1271 -> 0.9762052936395043 I: 0.0  Test: response\_time\_task2 > 1661.622918 -> 0.5476634999661314 I: 0.0  Test: score\_math\_course2 > 7.801633 -> 1.237075199923499 I: 0.0  Test: college\_math > -9.036201 -> 2.6287847998374314 I: 0.0  Induction Time: 0.046 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 102 rules. (102 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp1.out  filename: view2tmp1.model  Process 2 side 2 finished!  Adding new rules to set...  Adding new rules to set...  1  New rules cicle 1: 6  New rules cicle 2: 1  Using guided expansion with join procedure constrained!  max number of rules: 16  6.25% completed...  num redescriptions: 3  12.5% completed...  num redescriptions: 3  18.75% completed...  num redescriptions: 3  25.0% completed...  num redescriptions: 3  31.25% completed...  num redescriptions: 3  37.5% completed...  num redescriptions: 3  43.75% completed...  num redescriptions: 3  50.0% completed...  num redescriptions: 3  56.25% completed...  num redescriptions: 3  62.5% completed...  num redescriptions: 3  68.75% completed...  num redescriptions: 3  75.0% completed...  num redescriptions: 3  81.25% completed...  num redescriptions: 3  87.5% completed...  num redescriptions: 3  93.75% completed...  num redescriptions: 3  100.0% completed...  num redescriptions: 3  100% completed!  Num times join: 2  New redescriptions: 1  Number of viewes: 1  Running index: 6  OOIndRR: 77  OOIndRR1: 111  Iteration: 7  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view2.s  Path: /usr/share/jars/view1.s  New rule index: 111  Rule size: 117  nARules: 6  New number of attributes: 16  New size: 15  l: 9  inc: 6  l+inc: 15  Old size: 9  New rule index: 77  Rule size: 78  nARules: 1  New number of attributes: 11  New size: 10  l: 9  inc: 1  l+inc: 10  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1,1,1], N=[5.035,19.806,5.828,76.014,38.527,8.654]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1,1,1], N=[1,1,1,1,1,1]  Test: college\_math > 93.37069 -> 4.676169010993448 I: 0.0  Test: score\_math\_course1 > 82.130953 -> 6.439995386696204 I: 0.0  Test: response\_time\_task2 > 1773.13894 -> 3.871971511522368 I: 0.0  Test: college\_math > 100.171346 -> 2.7490438502739796 I: 0.0  Test: response\_time\_task2 > 1974.094761 -> 1.6498682852347883 I: 0.0  Test: college\_math > 102.806749 -> 1.9071907230458987 I: 0.0  Test: response\_time\_task2 > 2194.289677 -> 2.273878690862356 I: 0.0  Test: response\_time\_task2 > 1889.80251 -> 3.043492739624213 I: 0.0  Test: score\_math\_course2 > 7.40731 -> 2.808477263625946 I: 0.0  Test: response\_time\_task2 > 2309.361431 -> 1.793000718485679 I: 0.0  Test: college\_math > 39.862828 -> 1.3246689503333435 I: 0.0  Test: college\_math > 77.078506 -> 1.1241953633104398 I: 0.0  Test: response\_time\_task2 > 2628.377054 -> 1.9071907230458987 I: 0.0  Test: college\_math > 47.858723 -> 0.788526681038733 I: 0.0  Test: college\_math > 30.165629 -> 4.823277794519284 I: 0.0  Test: college\_math > 14.01366 -> 1.5893256025382478 I: 0.0  Test: college\_math > 36.632244 -> 1.1942459150862277 I: 0.0  Test: college\_math > 71.197165 -> 1.8134755396559221 I: 0.0  Test: score\_math\_course1 > 78.471335 -> 1.278529163144547 I: 0.0  Test: response\_time\_task2 > 1994.760736 -> 0.5151098901098903 I: 0.0  Test: response\_time\_task2 > 2007.024838 -> 0.48076923076923106 I: 0.0  Test: college\_math > 66.276256 -> 1.1098021902336015 I: 0.0  Test: college\_math > 51.433236 -> 0.806163249777339 I: 0.0  Test: score\_math\_course1 > 48.842833 -> 0.5900349650349652 I: 0.0  Test: score\_math\_course2 > 49.306848 -> 2.5921133322626435 I: 0.0  Test: response\_time\_task2 > 2033.079524 -> 0.45259121674427105 I: 0.0  Test: score\_math\_course1 > 29.319077 -> 3.053257443805178 I: 0.0  Test: response\_time\_task2 > 2007.347339 -> 4.500747156831206 I: 0.0  Test: response\_time\_task2 > 2180.825334 -> 1.804131323983361 I: 0.0  Test: response\_time\_task2 > 2220.206245 -> 0.45259121674427105 I: 0.0  Test: score\_math\_course1 > 8.182106 -> 0.5889423076923079 I: 0.0  Test: response\_time\_task2 > 1973.522361 -> 0.4326923076923075 I: 0.0  Test: score\_math\_course2 > 84.304124 -> 4.0356159119924655 I: 0.0  Test: response\_time\_task2 > 1426.995599 -> 3.2907560147151322 I: 0.0  Test: college\_math > 84.638252 -> 6.8738240934566 I: 0.0  Test: college\_math > 21.64241 -> 2.7438398912290154 I: 0.0  Test: response\_time\_task2 > 1416.663477 -> 2.200125055032146 I: 0.0  Test: response\_time\_task2 > 1845.176919 -> 0.6262834851263088 I: 0.0  Test: response\_time\_task2 > 1607.67597 -> 0.5061929240840755 I: 0.0  Test: response\_time\_task2 > 1710.101716 -> 0.3365384615384617 I: 0.0  Test: response\_time\_task2 > 1690.616142 -> 0.24038461538461542 I: 0.0  Test: response\_time\_task2 > 1665.144716 -> 0.2403846153846153 I: 0.0  Test: response\_time\_task2 > 1568.038967 -> 3.0172747782951412 I: 0.0  Test: response\_time\_task2 > 1363.214849 -> 2.6488301408815484 I: 0.0  Test: response\_time\_task2 > 1180.250464 -> 1.013604852131368 I: 0.0  Test: college\_math > 18.460267 -> 5.067567567567568 I: 0.0  Test: response\_time\_task2 > 1617.258555 -> 2.172437840372501 I: 0.0  Test: response\_time\_task2 > 1419.619277 -> 0.5431094600931256 I: 0.0  Induction Time: 0.045 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 96 rules. (96 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp.out  filename: view2tmp.model  Process 2 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1], N=[4.377]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1], N=[1]  Test: cognitive\_task2 > 68.256988 -> 11.226048073496798 I: 0.0  Test: cognitive\_task2 > 76.395168 -> 4.2439567823734325 I: 0.0  Test: iq > 78.097244 -> 7.2548680148886575 I: 0.0  Test: practice\_task2 > 4.199257 -> 4.6114213330423866 I: 0.0  Test: iq > 115.495396 -> 2.9422323011403506 I: 0.0  Test: cognitive\_task2 > 60.891919 -> 3.647150359852171 I: 0.0  Test: practice\_task2 > 13.185685 -> 5.9083835829605125 I: 0.0  Test: stress\_before\_test1 > 51.531796 -> 1.0941451079556508 I: 0.0  Test: stress\_before\_test1 > 53.643012 -> 1.312974129546781 I: 0.0  Test: iq > 88.757725 -> 3.587430938755176 I: 0.0  Test: iq > 100.649751 -> 4.278546127037082 I: 0.0  Test: cognitive\_task2 > 50.584289 -> 5.194969258222471 I: 0.0  Test: stress\_before\_test1 > 37.632475 -> 3.009420068358022 I: 0.0  Test: practice\_task2 > 5.817846 -> 1.2504515519493151 I: 0.0  Test: iq > 113.461431 -> 4.376580431822603 I: 0.0  Test: practice\_task2 > 10.371842 -> 5.904635523302165 I: 0.0  Test: cognitive\_task2 > 49.32323 -> 7.161677070255171 I: 0.0  Test: stress\_before\_test1 > 32.608489 -> 4.6683524606107785 I: 0.0  Test: practice\_task2 > 6.192681 -> 2.625948259093562 I: 0.0  Test: stress\_before\_test1 > 60.168724 -> 0.9378386639619904 I: 0.0  Test: stress\_before\_test1 > 62.390978 -> 1.0941451079556508 I: 0.0  Test: iq > 87.56499 -> 4.684562017765675 I: 0.0  Test: stress\_before\_test1 > 45.654942 -> 1.312974129546781 I: 0.0  Test: score\_test1 > 1230.919256 -> 4.681320106334695 I: 0.0  Test: practice\_task2 > 13.365333 -> 5.495462733523336 I: 0.0  Test: stress\_before\_test1 > 39.904398 -> 3.7777388637854976 I: 0.0  Test: score\_test1 > 909.636713 -> 1.930844308157032 I: 0.0  Test: stress\_before\_test1 > 36.186858 -> 3.2824353238669524 I: 0.0  Test: stress\_before\_test1 > 32.201765 -> 1.0941451079556508 I: 0.0  Test: stress\_before\_test1 > 54.318679 -> 7.815322199683221 I: 0.0  Test: cognitive\_task2 > 42.796394 -> 6.252257759746575 I: 0.0  Induction Time: 0.039 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 62 rules. (62 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp1.out  filename: view1tmp1.model  Process 1 side 2 finished!  Adding new rules to set...  Adding new rules to set...  New rules cicle 1: 4  New rules cicle 2: 2  Using guided expansion with join procedure constrained!  max number of rules: 26  3.8461538461538463% completed...  num redescriptions: 3  7.6923076923076925% completed...  num redescriptions: 3  11.538461538461538% completed...  num redescriptions: 3  15.384615384615385% completed...  num redescriptions: 3  19.230769230769234% completed...  num redescriptions: 3  23.076923076923077% completed...  num redescriptions: 3  26.923076923076923% completed...  num redescriptions: 3  30.76923076923077% completed...  num redescriptions: 3  34.61538461538461% completed...  num redescriptions: 3  38.46153846153847% completed...  num redescriptions: 3  42.30769230769231% completed...  num redescriptions: 3  46.15384615384615% completed...  num redescriptions: 3  50.0% completed...  num redescriptions: 3  53.84615384615385% completed...  num redescriptions: 3  57.692307692307686% completed...  num redescriptions: 3  61.53846153846154% completed...  num redescriptions: 3  65.38461538461539% completed...  num redescriptions: 3  69.23076923076923% completed...  num redescriptions: 3  73.07692307692307% completed...  num redescriptions: 3  76.92307692307693% completed...  num redescriptions: 3  80.76923076923077% completed...  num redescriptions: 3  84.61538461538461% completed...  num redescriptions: 3  88.46153846153845% completed...  num redescriptions: 3  92.3076923076923% completed...  num redescriptions: 3  96.15384615384616% completed...  num redescriptions: 3  100.0% completed...  num redescriptions: 3  100% completed!  Num times join: 2  New redescriptions: 1  Number of viewes: 1  Running index: 7  OOIndRR: 78  OOIndRR1: 117  Iteration: 8  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view1.s  Path: /usr/share/jars/view2.s  New rule index: 78  Rule size: 82  nARules: 4  New number of attributes: 14  New size: 13  l: 9  inc: 4  l+inc: 13  Old size: 9  New rule index: 117  Rule size: 119  nARules: 2  New number of attributes: 12  New size: 11  l: 9  inc: 2  l+inc: 11  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1,1], N=[10.494,11.817,10.494,4.011]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1,1], N=[1,1,1,1]  Test: stress\_before\_test1 > 58.323311 -> 9.31160578015357 I: 0.0  Test: iq > 85.227777 -> 7.0311329910163 I: 0.0  Test: cognitive\_task2 > 40.06381 -> 8.640595968179205 I: 0.0  Test: stress\_before\_test1 > 58.851147 -> 6.561102975565547 I: 0.0  Test: stress\_before\_test1 > 62.967257 -> 8.255310422530854 I: 0.0  Test: score\_test1 > 746.209444 -> 9.850513122941429 I: 0.0  Test: stress\_before\_test1 > 63.424058 -> 2.7613082320844065 I: 0.0  Test: stress\_before\_test1 > 64.6215 -> 2.777583517827159 I: 0.0  Test: score\_test1 > 1034.941207 -> 3.6239760069611275 I: 0.0  Test: cognitive\_task2 > 57.848693 -> 1.5824231927815455 I: 0.0  Test: cognitive\_task2 > 47.071863 -> 0.4376083891148965 I: 0.0  Test: practice\_task2 > 9.006595 -> 1.2034230700659654 I: 0.0  Test: cognitive\_task2 > 36.718207 -> 3.9497507072192946 I: 0.0  Test: iq > 73.789732 -> 3.4644626574878643 I: 0.0  Test: cognitive\_task2 > 51.288289 -> 2.822423453433629 I: 0.0  Test: iq > 115.448021 -> 6.3668863760918235 I: 0.0  Test: practice\_task2 > 14.300677 -> 1.2535656979853806 I: 0.0  Test: practice\_task2 > 10.576348 -> 0.6267828489926903 I: 0.0  Test: practice\_task2 > 11.138153 -> 1.044638081654484 I: 0.0  Test: stress\_before\_test1 > 54.107763 -> 0.33428418612943456 I: 0.0  Test: iq > 114.607596 -> 10.193494209816876 I: 0.0  Test: iq > 107.334707 -> 5.4676721434842595 I: 0.0  Test: stress\_before\_test1 > 37.632475 -> 0.6685683722588696 I: 0.0  Test: score\_test1 > 1067.236915 -> 0.334284186129435 I: 0.0  Test: score\_test1 > 1075.100584 -> 9.204360773614695 I: 0.0  Test: iq > 75.086312 -> 1.860364166285553 I: 0.0  Test: iq > 81.967425 -> 1.3800357670013934 I: 0.0  Test: cognitive\_task2 > 51.029219 -> 0.5871539978950846 I: 0.0  Test: cognitive\_task2 > 41.853217 -> 0.6700878458321853 I: 0.0  Test: iq > 102.040557 -> 1.041677727968544 I: 0.0  Test: iq > 105.647868 -> 0.8752167782297935 I: 0.0  Test: cognitive\_task2 > 45.65756 -> 0.729347315191494 I: 0.0  Test: score\_test1 > 1126.430728 -> 0.5014262791941522 I: 0.0  Test: stress\_before\_test1 > 41.353426 -> 0.7521394187912285 I: 0.0  Test: stress\_before\_test1 > 35.514966 -> 0.2507131395970762 I: 0.0  Test: stress\_before\_test1 > 56.832956 -> 1.1296500082994667 I: 0.0  Test: iq > 87.504868 -> 0.87969522665641 I: 0.0  Test: practice\_task2 > 13.410868 -> 0.3492907517606316 I: 0.0  Test: stress\_before\_test1 > 37.269505 -> 0.10815076610070007 I: 0.0  Test: stress\_before\_test1 > 35.79408 -> 0.33428418612943456 I: 0.0  Test: cognitive\_task2 > 42.715178 -> 2.005705116776609 I: 0.0  Test: practice\_task2 > 11.382455 -> 1.0256446619880388 I: 0.0  Test: cognitive\_task2 > 41.197709 -> 1.2307735943856462 I: 0.0  Test: stress\_before\_test1 > 42.735225 -> 0.5014262791941524 I: 0.0  Test: practice\_task2 > 10.419664 -> 1.0028525583883046 I: 0.0  Induction Time: 0.043 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 90 rules. (90 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp.out  filename: view1tmp.model  Process 1 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1], N=[7.2,6.775]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1], N=[1,1]  Test: score\_math\_course1 > 40.693293 -> 19.640211087969647 I: 0.0  Test: score\_math\_course2 > 101.680392 -> 5.336118043144708 I: 0.0  Test: college\_math > 77.538161 -> 1.7299473520030517 I: 0.0  Test: college\_math > 82.485763 -> 12.47773906310491 I: 0.0  Test: response\_time\_task2 > 2382.308407 -> 1.4973286875725975 I: 0.0  Test: response\_time\_task2 > 2600.690718 -> 1.746883468834688 I: 0.0  Test: response\_time\_task2 > 2023.826994 -> 1.746883468834688 I: 0.0  Test: response\_time\_task2 > 1180.250464 -> 2.214628222784973 I: 0.0  Test: score\_math\_course1 > 37.238268 -> 15.917893848749827 I: 0.0  Test: score\_math\_course2 > 22.313455 -> 4.544137857900324 I: 0.0  Test: response\_time\_task2 > 1894.386652 -> 5.2537235772357676 I: 0.0  Test: response\_time\_task2 > 2057.744975 -> 12.769467028003614 I: 0.0  Test: response\_time\_task2 > 1973.522361 -> 1.482294489611565 I: 0.0  Test: response\_time\_task2 > 1910.999473 -> 4.446883468834688 I: 0.0  Test: score\_math\_course2 > 8.528537 -> 9.672942008192464 I: 0.0  Test: response\_time\_task2 > 1617.258555 -> 7.174464432427129 I: 0.0  Test: score\_math\_course2 > 20.27315 -> 5.5439043341482375 I: 0.0  Test: score\_math\_course1 > 10.877231 -> 6.560647121622733 I: 0.0  Test: college\_math > 6.195983 -> 7.658355916892502 I: 0.0  Induction Time: 0.037 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 38 rules. (38 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp1.out  filename: view2tmp1.model  Process 2 side 2 finished!  Adding new rules to set...  Adding new rules to set...  New rules cicle 1: 3  New rules cicle 2: 0  Using guided expansion with join procedure constrained!  max number of rules: 12  8.333333333333332% completed...  num redescriptions: 3  16.666666666666664% completed...  num redescriptions: 3  25.0% completed...  num redescriptions: 3  33.33333333333333% completed...  num redescriptions: 3  41.66666666666667% completed...  num redescriptions: 3  50.0% completed...  num redescriptions: 3  58.333333333333336% completed...  num redescriptions: 3  66.66666666666666% completed...  num redescriptions: 3  75.0% completed...  num redescriptions: 3  83.33333333333334% completed...  num redescriptions: 3  91.66666666666666% completed...  num redescriptions: 3  100.0% completed...  num redescriptions: 3  100% completed!  Num times join: 2  New redescriptions: 1  Number of viewes: 1  Running index: 8  OOIndRR: 82  OOIndRR1: 119  Iteration: 9  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view2.s  New rule index: 119  Rule size: 122  nARules: 3  New number of attributes: 13  New size: 12  l: 9  inc: 3  l+inc: 12  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1], N=[31.034,11.817,5.035]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1], N=[1,1,1]  Test: college\_math > 105.438347 -> 21.460457947186825 I: 0.0  Test: college\_math > -7.278964 -> 8.6065688671558 I: 0.0  Test: college\_math > 93.37069 -> 8.355217334531758 I: 0.0  Test: score\_math\_course2 > 99.128806 -> 7.401149902943873 I: 0.0  Test: response\_time\_task2 > 1929.045879 -> 0.41955694786305564 I: 0.0  Test: score\_math\_course1 > 89.606496 -> 2.055829044528977 I: 0.0  Test: score\_math\_course2 > 87.448439 -> 0.629335421794585 I: 0.0  Test: college\_math > 30.165629 -> 2.724487768494157 I: 0.0  Test: score\_math\_course1 > 85.50381 -> 3.4277264187468717 I: 0.0  Test: response\_time\_task2 > 1732.806182 -> 7.021629277130409 I: 0.0  Test: response\_time\_task2 > 1359.317594 -> 1.4043258554260816 I: 0.0  Test: response\_time\_task2 > 2615.498593 -> 1.2966305928593016 I: 0.0  Test: response\_time\_task2 > 1568.038967 -> 0.6829211573552243 I: 0.0  Test: response\_time\_task2 > 1607.67597 -> 4.20444106261883 I: 0.0  Test: college\_math > 42.641878 -> 1.3687413928935293 I: 0.0  Test: college\_math > 76.743658 -> 0.762830814296473 I: 0.0  Test: college\_math > 82.891447 -> 1.1442462214446993 I: 0.0  Test: college\_math > 81.703299 -> 1.2586708435891696 I: 0.0  Test: response\_time\_task2 > 1905.469937 -> 0.41955694786305653 I: 0.0  Test: score\_math\_course2 > 49.535972 -> 0.2261108772632614 I: 0.0  Test: college\_math > 51.433236 -> 0.19671534551820447 I: 0.0  Test: college\_math > 46.997034 -> 0.5993670683757946 I: 0.0  Test: college\_math > 50.968355 -> 0.5034683374356677 I: 0.0  Test: score\_math\_course1 > 42.97013 -> 3.428192046393579 I: 0.0  Test: score\_math\_course1 > 29.343476 -> 0.995871436685936 I: 0.0  Test: score\_math\_course2 > 41.767535 -> 1.6182910846146465 I: 0.0  Test: response\_time\_task2 > 1972.437642 -> 0.41955694786305653 I: 0.0  Test: score\_math\_course1 > 17.629787 -> 4.33351542875085 I: 0.0  Test: college\_math > 29.051925 -> 6.35280128264705 I: 0.0  Test: score\_math\_course2 > 31.384684 -> 4.993158597070512 I: 0.0  Test: response\_time\_task2 > 2220.206245 -> 1.8724344739014427 I: 0.0  Test: response\_time\_task2 > 1889.80251 -> 5.617303421704327 I: 0.0  Test: college\_math > 10.895057 -> 1.710595571860427 I: 0.0  Test: response\_time\_task2 > 2180.825334 -> 3.2062220726285604 I: 0.0  Test: response\_time\_task2 > 2061.037307 -> 0.5594092638174082 I: 0.0  Test: response\_time\_task2 > 1602.7425 -> 1.4043258554260816 I: 0.0  Induction Time: 0.042 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 72 rules. (72 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp.out  filename: view2tmp.model  Process 2 side 1 finished!  Adding new rules to set...  New rules cicle 1: 3  New rules cicle 2: 0  Using guided expansion with join procedure constrained!  max number of rules: 0  Num times join: 2  New redescriptions: 1  Number of viewes: 1  Running index: 9  OOIndRR: 82  OOIndRR1: 119  Iteration: 10  startPerc: 0.0  endPerc: 1.0  Read dataset num doubles: 9  Read dataset num doubles: 9  Path: /usr/share/jars/view1.s  Path: /usr/share/jars/view2.s  New rule index: 82  Rule size: 85  nARules: 3  New number of attributes: 13  New size: 12  l: 9  inc: 3  l+inc: 12  Old size: 9  New rule index: 119  Rule size: 122  nARules: 3  New number of attributes: 13  New size: 12  l: 9  inc: 3  l+inc: 12  Old size: 9  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view1tmp'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1], N=[76.014,4.217,4.144]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1], N=[1,1,1]  Test: stress\_before\_test1 > 57.584458 -> 16.921243391864323 I: 0.0  Test: stress\_before\_test1 > 63.424058 -> 9.213924628101154 I: 0.0  Test: score\_test1 > 777.038304 -> 26.63473840973084 I: 0.0  Test: iq > 117.233698 -> 3.981453014776194 I: 0.0  Test: cognitive\_task2 > 37.354812 -> 3.4085412394006163 I: 0.0  Test: iq > 113.541881 -> 3.095427291348347 I: 0.0  Test: practice\_task2 > 10.522956 -> 3.567893221145921 I: 0.0  Test: stress\_before\_test1 > 59.82388 -> 0.736783938110149 I: 0.0  Test: practice\_task2 > 14.188938 -> 1.0415250277784107 I: 0.0  Test: iq > 79.175371 -> 0.564039177093294 I: 0.0  Test: stress\_before\_test1 > 59.339384 -> 0.6967542775858344 I: 0.0  Test: practice\_task2 > 4.611364 -> 4.019321794498609 I: 0.0  Test: cognitive\_task2 > 51.899142 -> 3.8000627803729756 I: 0.0  Test: cognitive\_task2 > 56.430155 -> 4.0953668093656255 I: 0.0  Test: practice\_task2 > 8.493937 -> 3.4587596959132716 I: 0.0  Test: practice\_task2 > 13.185685 -> 2.8584790875316255 I: 0.0  Test: stress\_before\_test1 > 53.643012 -> 4.335359949422968 I: 0.0  Test: iq > 83.280165 -> 3.4410700610071814 I: 0.0  Test: cognitive\_task2 > 37.650167 -> 0.8695602873113213 I: 0.0  Test: iq > 89.459578 -> 0.7059805352106441 I: 0.0  Test: practice\_task2 > 7.900248 -> 0.7280868765548814 I: 0.0  Test: cognitive\_task2 > 47.412533 -> 0.07195155645606999 I: 0.0  Test: iq > 100.649751 -> 0.5756124516485533 I: 0.0  Test: practice\_task2 > 6.730231 -> 1.6722102662060006 I: 0.0  Test: stress\_before\_test1 > 35.79408 -> 2.7870171103433363 I: 0.0  Test: iq > 87.504868 -> 2.3888718088657193 I: 0.0  Test: stress\_before\_test1 > 47.164719 -> 4.180525665515005 I: 0.0  Test: cognitive\_task2 > 42.674837 -> 2.8102422529295303 I: 0.0  Test: stress\_before\_test1 > 51.446701 -> 1.0451314163787513 I: 0.0  Test: practice\_task2 > 10.009902 -> 3.5103144080276785 I: 0.0  Test: stress\_before\_test1 > 39.340178 -> 0.8361051331030003 I: 0.0  Test: stress\_before\_test1 > 34.896853 -> 0.9953632536940489 I: 0.0  Test: stress\_before\_test1 > 43.995828 -> 0.8361051331030012 I: 0.0  Induction Time: 0.044 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 66 rules. (66 of them are unique.)  Number of models after: 3  null  Output written to: view1tmp.out  filename: view1tmp.model  Process 1 side 1 finished!  Clus v2.12 - Software for Predictive Clustering  Copyright (C) 2007, 2008, 2009, 2010  Katholieke Universiteit Leuven, Leuven, Belgium  Jozef Stefan Institute, Ljubljana, Slovenia  This program is free software and comes with ABSOLUTELY NO  WARRANTY. You are welcome to redistribute it under certain  conditions. Type 'clus -copying' for distribution details.  Loading 'view2tmp1'  Reading ARFF Header  Reading CSV Data  Found 150 rows  Space required by nominal attributes: 0 bytes/tuple regular, 0 bytes/tuple bitwise  Clustering: Weights C=[1,1,1], N=[31.034,11.817,5.035]  Has missing values: false  Run: 01  Ensemble Classifier  Memory And Time Optimization = false  Out-Of-Bag Estimate of the error = false  Perform Feature Ranking = false  Ensemble Method: Random Subspaces  readMatrixFromFile called!  Reading matrix from file2 called...  Bag: 1  Clustering: Weights C=[1,1,1], N=[1,1,1]  Test: college\_math > 105.438347 -> 21.460457947186825 I: 0.0  Test: college\_math > -7.278964 -> 8.6065688671558 I: 0.0  Test: college\_math > 93.37069 -> 8.355217334531758 I: 0.0  Test: score\_math\_course2 > 99.128806 -> 7.401149902943873 I: 0.0  Test: response\_time\_task2 > 1929.045879 -> 0.41955694786305564 I: 0.0  Test: score\_math\_course1 > 89.606496 -> 2.055829044528977 I: 0.0  Test: score\_math\_course2 > 87.448439 -> 0.629335421794585 I: 0.0  Test: college\_math > 30.165629 -> 2.724487768494157 I: 0.0  Test: score\_math\_course1 > 85.50381 -> 3.4277264187468717 I: 0.0  Test: response\_time\_task2 > 1732.806182 -> 7.021629277130409 I: 0.0  Test: response\_time\_task2 > 1359.317594 -> 1.4043258554260816 I: 0.0  Test: response\_time\_task2 > 2615.498593 -> 1.2966305928593016 I: 0.0  Test: response\_time\_task2 > 1568.038967 -> 0.6829211573552243 I: 0.0  Test: response\_time\_task2 > 1607.67597 -> 4.20444106261883 I: 0.0  Test: college\_math > 42.641878 -> 1.3687413928935293 I: 0.0  Test: college\_math > 76.743658 -> 0.762830814296473 I: 0.0  Test: college\_math > 82.891447 -> 1.1442462214446993 I: 0.0  Test: college\_math > 81.703299 -> 1.2586708435891696 I: 0.0  Test: response\_time\_task2 > 1905.469937 -> 0.41955694786305653 I: 0.0  Test: score\_math\_course2 > 49.535972 -> 0.2261108772632614 I: 0.0  Test: college\_math > 51.433236 -> 0.19671534551820447 I: 0.0  Test: college\_math > 46.997034 -> 0.5993670683757946 I: 0.0  Test: college\_math > 50.968355 -> 0.5034683374356677 I: 0.0  Test: score\_math\_course1 > 42.97013 -> 3.428192046393579 I: 0.0  Test: score\_math\_course1 > 29.343476 -> 0.995871436685936 I: 0.0  Test: score\_math\_course2 > 41.767535 -> 1.6182910846146465 I: 0.0  Test: response\_time\_task2 > 1972.437642 -> 0.41955694786305653 I: 0.0  Test: score\_math\_course1 > 17.629787 -> 4.33351542875085 I: 0.0  Test: college\_math > 29.051925 -> 6.35280128264705 I: 0.0  Test: score\_math\_course2 > 31.384684 -> 4.993158597070512 I: 0.0  Test: response\_time\_task2 > 2220.206245 -> 1.8724344739014427 I: 0.0  Test: response\_time\_task2 > 1889.80251 -> 5.617303421704327 I: 0.0  Test: college\_math > 10.895057 -> 1.710595571860427 I: 0.0  Test: response\_time\_task2 > 2180.825334 -> 3.2062220726285604 I: 0.0  Test: response\_time\_task2 > 2061.037307 -> 0.5594092638174082 I: 0.0  Test: response\_time\_task2 > 1602.7425 -> 1.4043258554260816 I: 0.0  Induction Time: 0.041 sec  Pruning Time: 0.0 sec  Number of models before: 2  ensamble transform to rules: true  Transformed 1 trees in ensemble into rules.  Created 72 rules. (72 of them are unique.)  Number of models after: 3  null  Output written to: view2tmp1.out  filename: view2tmp1.model  Process 2 side 2 finished!  Adding new rules to set...  Adding new rules to set...  New rules cicle 1: 1  New rules cicle 2: 0  Using guided expansion with join procedure constrained!  max number of rules: 3  33.33333333333333% completed...  num redescriptions: 3  66.66666666666666% completed...  num redescriptions: 3  100.0% completed...  num redescriptions: 3  100% completed!  Num times join: 2  New redescriptions: 1  Number of viewes: 1  Running index: 10  Redescription size main: 3  Redescription size main after remove: 3  Redescription size main after filter: 3  Redescription size main after Pvalremove: 3  Found 0 redescriptions with JS=1.0 and minsupport>2  Found 3 redescriptions with JS>0.5  3 redescriptions with JS>0.5 left after elimination of long rules  Sorting rules!  numViews: 2  Number of viewes used: 2  numViews: 2  Number of viewes used: 2  numViews: 2  Number of viewes used: 2  Computing rule score and sorting!  33.33333333333333% completed...  50.0% completed...  avrgJS: 0.4301823264087415  avrPval: 0.8193530964074728  AEJ: 0.25136612021857924  AAJ: 0.7142857142857143  Rule size: 0.5666666666666668  Results score: 0.5563141181307683  Java, output file: /usr/share/jars/experiment.rr1.rr  Redescriptions:  Number of redescriptions: 3  numViews: 2  Number of viewes used: 2  33.33333333333333% completed...  numViews: 2  Number of viewes used: 2  66.66666666666666% completed...  numViews: 2  Number of viewes used: 2  100.0% completed...  100% completed!  Number of OK redescriptions: 3  Number of not OK redescriptions: 0  Stopping the containers...  Stopping tests\_db\_1 ... done  Removing tests\_clus-rm\_run\_1 ... done  Removing tests\_woken\_db\_setup\_run\_1 ... done  Removing tests\_sample\_data\_db\_setup\_run\_1 ... done  Removing tests\_create\_dbs\_run\_1 ... done  Removing tests\_wait\_dbs\_run\_1 ... done  Removing tests\_db\_1 ... done  Removing network tests\_default  Stopping the containers...  Removing network tests\_default  WARNING: Network tests\_default not found. |