**School Grades**

Predict grades of school students based on lifestyle attributes

Instances: 649

Attributes: 33

Tasks: Classification, Regression

Downloads: 3759

Year Published: 2008

Missing Values: No

Attribute Details:

| **Name** | **Type** | **Description** |
| --- | --- | --- |
| school | string | student's school (binary: "GP" Gabriel Pereira or "MS" Mousinho da Silveira) |
| sex | string | student's sex (binary: "F" female or "M" male) |
| age | integer | student's age (numeric: from 15 to 22) |
| address | string | student's home address type (binary: "U" urban or "R" rural) |
| famsize | string | family size (binary: "LE3" less or equal to 3 or "GT3" greater than 3) |
| Pstatus | string | parent's cohabitation status (binary: "T" living together or "A" apart) |
| Medu | integer | mother's education (numeric: 0: none, 1: primary education (4th grade), 2: 5th to 9th grade, 3 \_ secondary education or 4 \_ higher education) |
| Fedu | integer | father's education (numeric: 0 - none, 1 - primary education (4th grade), 2 \_ 5th to 9th grade, 3 \_ secondary education or 4 \_ higher education) |
| Mjob | string | mother's job (nominal: "teacher", "health" care related, civil "services" (e.g. administrative or police), "at\_home" or "other") |
| Fjob | string | father's job (nominal: "teacher", "health" care related, civil "services" (e.g. administrative or police), "at\_home" or "other") |
| reason | string | reason to choose this school (nominal: close to "home", school "reputation", "course" preference or "other") |
| guardian | string | student's guardian (nominal: "mother", "father" or "other") |
| traveltime | integer | home to school travel time (numeric: 1 - <15 min., 2 - 15 to 30 min., 3 - 30 min. to 1 hour, or 4 - >1 hour) |
| studytime | integer | weekly study time (numeric: 1 - <2 hours, 2 - 2 to 5 hours, 3 - 5 to 10 hours, or 4 - >10 hours) |
| G3 | integer | Predictor Class: final grade (numeric: from 0 to 20) |

### X Decoder Tables

| **Column Name** | **One Hot Val** | **Decoded Val** |
| --- | --- | --- |
| school | 1,0 | GP |
| school | 0,1 | MS |
| sex | 1,0 | F |
| sex | 0,1 | M |
| address | 1,0 | R |
| address | 0,1 | U |
| famsize | 1,0 | GT3 |
| famsize | 0,1 | LE3 |
| Pstatus | 1,0 | A |
| Pstatus | 0,1 | T |
| Mjob | 0,0,1,0,0 | other |
| Mjob | 0,1,0,0,0 | health |
| Mjob | 1,0,0,0,0 | at\_home |
| Mjob | 0,0,0,0,1 | teacher |
| Mjob | 0,0,0,1,0 | services |
| Fjob | 0,0,1,0,0 | other |
| Fjob | 0,1,0,0,0 | health |
| Fjob | 1,0,0,0,0 | at\_home |
| Fjob | 0,0,0,0,1 | teacher |
| Fjob | 0,0,0,1,0 | services |
| reason | 0,1,0,0 | home |
| reason | 0,0,1,0 | other |
| reason | 1,0,0,0 | course |
| reason | 0,0,0,1 | reputation |
| guardian | 0,0,1 | other |
| guardian | 1,0,0 | father |
| guardian | 0,1,0 | mother |
| schoolsup | 1,0 | no |
| schoolsup | 0,1 | yes |
| famsup | 1,0 | no |
| famsup | 0,1 | yes |
| paid | 1,0 | no |
| paid | 0,1 | yes |
| activities | 1,0 | no |
| activities | 0,1 | yes |
| nursery | 1,0 | no |
| nursery | 0,1 | yes |
| higher | 1,0 | no |
| higher | 0,1 | yes |
| internet | 1,0 | no |
| internet | 0,1 | yes |
| romantic | 1,0 | no |
| romantic | 0,1 | yes |