

R documentation

of ‘discretize.Rd’

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| discretize | <i>Discretize continuous data.</i> |
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Description

Converts continuous columns to discrete.

Usage

```
discretize(dataset, input, ndigs=0, nlevels=10)
```

Arguments

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| dataset | The dataset to discretize, data frame/table. |
| input | Optional specification for partitioning, giving the number of partitions and labels for each partition. List of lists, one list per column to be converted. The outer-most list states the columns to be converted, and each inner list holds the name of the column, the number of partitions, and a list of labels for each partition. |
| ndigs | Number of digits to retain in forming labels/values for the discretized data, if input is not supplied. E.g. if ndigs is 2 and the original datum is 38.12, it becomes 38. |
| nlevels | The number of partitions to form, if input is NULL. |

Details

If input is not specified, each numeric column in the data will be discretized, with one exception: If a column is numeric but has fewer distinct values than nlevels, it is presumed to be an informal R factor and is not converted. However, it is best to use `makeFactor()` on such variables.

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Examples

```
data(prgeng)
pe <- prgeng[,c(1,3,5,7:9)] # extract vars of interest
pe25 <- pe[pe$wageinc < 250000,] # delete extreme values
pe25disc <- discretize(pe25) # age, wageinc and wkswrkd discretized

data(mlb)
# extract the height, weight, age, and position of players
m <- mlb[,4:7]

inp1 <- list("name" = "Height",
            "partitions"=4,
            "labels"=c("short", "shortmid", "tallmid", "tall"))

inp2 <- list("name" = "Weight",
            "partitions"=3,
            "labels"=c("light", "med", "heavy"))

inp3 <- list("name" = "Age",
            "partitions"=3,
            "labels"=c("young", "med", "old"))

# create one list to pass everything to discretize()
discreteinput <- list(inp1, inp2, inp3)

# at this point, all of the data has been discretized
discretizedmlb <- discretize(m, discreteinput)
```

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