

Euredit simple impute function: simp_imp

1 Purpose

simp_imp estimates missing values using the variable mean (for continuous variables) or mode (for categorical variables).

2 Specification

```
#include <euredit_sys.h>
```

```
void simp_imp (long n, long m, double *data, long *n_cat, long *cat_val,
               long maxcat, double miss_val, long *nimp, long *irow, long *icol,
               double *rval, long info[2])
```

3 Parameters

n

Input: the number of observations in the data.

Constraint: $n \geq 1$.

m

Input: the number of variables in the data.

Constraint: $m \geq 1$.

data[n*m]

Input: the data stored by row.

n_cat[m]

Input: if the i th variable is categorical, **n_cat**[i] must be set to the number of categories present; otherwise set **n_cat**[i] equal to zero.

cat_val[m*maxcat]

Input: the categories for the categorical variables. The categories for the i th variable are stored in **cat_val**[i ***maxcat**+ j], for $j = 1, 2, \dots, \mathbf{n_cat}[i]$. If all variables are continuous, **cat_val** can be set equal to NULL.

maxcat

Input: the maximum number of categories in any categorical variable.

miss_val

Input: the missing value indicator.

nimp

Output: the number of values replaced.

irow[nimp]

Output: the row indicator for a replacement value.

icol[nimp]

Output: the column indicator for a replacement value.

rval[nimp]

Output: the replacement value.

info

Output: information on the success of the function call.

info[0] = 0: the function successfully completed its task.

info[0] = i : the specification of the i th formal parameter was incorrect, $i = 1, 2, \dots, 12$.

info[0] = 99: the function failed to allocate enough memory.

info[1] contains additional information for system debugging.