Imputation of Missing Values with the R Package VIM

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Keywords: Missing Values, Imputation, Survey, R

The package VIM [4, 3] is developed to explore and analyze the structure of missing values in data using visualization methods, to impute these missing values with the built-in imputation methods and to verify the imputation process using visualization tools, as well as to produce high-quality graphics for publications.

The most common imputation methods such as hotdeck, kNN and regression imputation are implemented, but also more advanced methods like iterative robust regression estimation are available.

A point- and click graphical user interface has been developed to give access to these methods and tools to users with limited R skills. It is available in the package VIMGUI [2]. All important methods are supported by the flexible point- and click-interface.

The presentation describes the application of the methods available in the package VIM and demonstrates the usage of the graphical user interface of the VIMGUI package. Special attention is also given to the VIM integration of survey [1] objects.

References


