Computational Implementation of HDLSS and HDLLSS Clustering Methods

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Abstract: *This study implements a R package with a set of algorithms to cluster variables in high dimensional low sample size (HDLSS) data and high dimensional longitudinal low sample size (HDLLSS) data. These algorithms are based on the use of a p-value from two diferents statistical tests as a similarity measure for the clustering procedure: a nonparametric rank test of homogeneous distribution between groups of variables and a test of no simple effect on factorial design with measures observed over time. Applications on microarray data show promising results. The simulation studies reveal that the implemented clustering algorithms show an interesting performance to detecting groups in HDLSS and HDLLSS data structures.*

Keywords: clustering algorithms; HDLSS data; HDLLSS data; microarray analysis.

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