VisuClust

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Description

The VisuClust package provides functions to display the result of either disjoint (every observation belongs to one cluster) or fuzzy (for each observation i there is a vector $\mathbf{u}[i,c]$ with $\mathbf{c}=(1,...,m)$, which states the membership of the i.th observation for the cluster \mathbf{c} , where $\mathbf{sum}(\mathbf{u}[i,c])=1$) clusters.

Disjoint clustering's can be created with known hierarchical methods, if the desired number of clusters m is provided. See hclust kmeans from the cluster package.

The basis of the visualization is the method Sammon's Nonlinear Mapping (NLM), which displays all observations in a plane so that the distances in the multivariate space are approximated best. The NLM-results can be indicated by coloring the clusters, drawing lines between similar point pairs, and other features.

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References

Will be in the GIL conference transcript 2012: Visualisierung von Clustern in multivariaten Daten unter Einsatz von R Georg Ohmayer, Michael Sieger