

index.G2(clusterSim)

G2 internal cluster quality index
– Baker & Hubert adaptation of Goodman & Kruskal's Gamma statistics

$$G2(u) = \frac{s(+)-s(-)}{s(+)+s(-)},$$
$$G2(u) \in [-1, 1],$$

where: $s(+)$ – number of concordant comparisons (within-cluster dissimilarity is strictly less than a between-cluster dissimilarity),

$s(-)$ – number of discordant comparisons (within-cluster dissimilarity is strictly greater than a between-cluster dissimilarity),

u – number of clusters ($u = 2, \dots, n - 1$),

n – number of objects.

The value of u , which maximizes $G2(u)$, is regarded as specifying the number of clusters.

References

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