Package ‘NMI’

August 20, 2016

Title Normalized Mutual Information of Community Structure in Network
Version 2.0
Description Calculates the normalized mutual information (NMI) of two community structures in network analysis.
Depends R (>= 3.2.2)
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NMI 

Normalized Mutual Information of Community Structure in Network

Description
Calculates the normalized mutual information (NMI) of two community structures in network analysis.

Usage
NMI(X, Y)
Arguments

X  a data frame or matrix whose first column is the node id and the second column is module

Y  a data frame or matrix whose first column is the node id and the second column is module

Value

value  value of NMI

Examples

# Suppose X and Y are exactly the same
X <- data.frame(c(1,2,3), c(2,1,1))
Y <- X
# There NMI is 1
NMI(X, Y)

# Suppose X and Y are completely independent
X <- data.frame(c(1,2,3), c(2,1,1))
Y <- data.frame(c(5,6,7), c(2,1,1))
# There NMI is 0
NMI(X, Y)
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