

Degree & Strength

Description

This algorithm only accepts networks with undirected edges. It cannot work with directed edges. This algorithm also treats unweighted networks as networks whose edge weights are all 1.

For each node $node[i]$, this algorithm calculates the total node degree ($degree(node[i])$) and the total node strength ($strength(node[i])$), where:

- $degree(node[i])$ = total degree of $node[i]$ = number of edges $node[i]$ is connected to
- $strength(node[i])$ = the sum of the weights of all of the edges $node[i]$ is connected to

Given the nature of the node strength, if the input network is unweighted, the node degree will always equal the node strength for all nodes.

This algorithm outputs a version of the input network, annotated with the *degree* and *strength* node attributes.

Links

- [Node Degree](#)
- [Source Code](#)

Acknowledgments

This algorithm was written by Duygu Balcan and integrated by Russell Duhon.