IIT Documentation

Data Structures

Node Struct

Network Struct

network.connect\_mat

The NxN binary connectivity matrix

network.options

An array of integers which represent the options (see Options section)

network.nodes

A struct array of node structs (see Node Struct)

network.num\_nodes

The number of nodes, N, in the full system.

network.tpm

A States X Node (2N X N) transition probability matrix for the entire system. This matrix does not need to be State X State because of conditional independence.

network.full\_system

An array of the numbers 1:N.

network.num\_subsets

The number of subsets in the system, 2N.

network.current\_state

An integer array of length N that is the current state of the system. This is only used when the software is set to only compute over one state as opposed to taking an average of all states.

network.num\_states

Total number of states of the system. This is equal to the product of the number of states of each node. The software is almost totally able to handle more than binary nodes, but there are still some changes that need to be made.

network.noise

A number in the range [0,.5] that adds noise into the output of every node. That is, the deterministic output will be correct with probability

1 - noise.

Output

Options