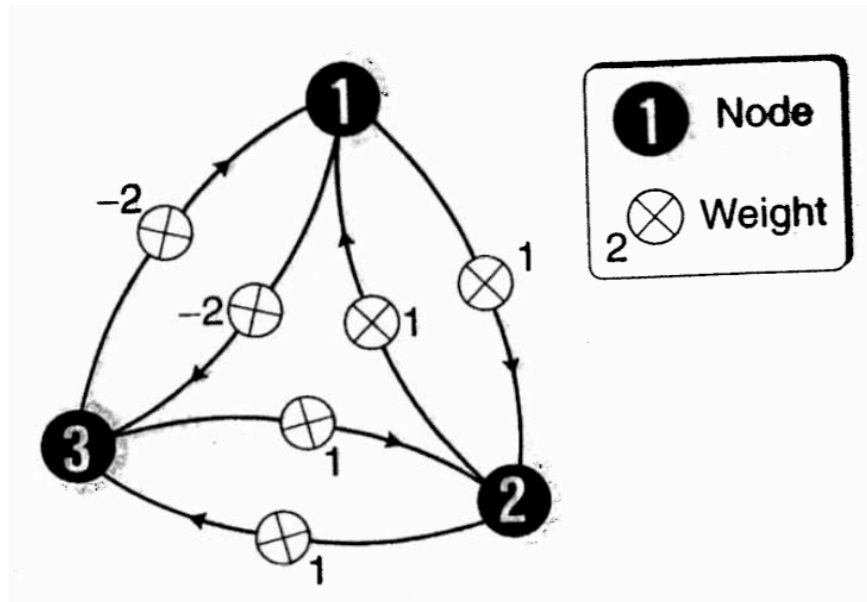


CSSE 413: Artificial Intelligence

Hopfield Network Worksheet

Consider the following Hopfield Net, in which the activation function outputs a 1, if the sum of the inputs are ≥ 0 .



Fill in the following table:

Components x_1 x_2 x_3	State label	Calculate node 1 output	Calculate node 2 output	Calculate node 3 output
0 0 0	0	1 0 0 (4)	0 1 0 (2)	0 0 1 (1)
0 0 1	1	0 0 1 (1)	0 1 1 (3)	0 0 1 (1)
0 1 0	2			
0 1 1	3			
1 0 0	4			
1 0 1	5			
1 1 0	6			
1 1 1	7			