

Problem set 9 Page Rank Algorithm

Excercise 1

Using PageRank algorithm with a damping factor of 0.7 and the initial PageRank value of every vertex being 0.2, compute PageRank values of the vertices for the following graph.

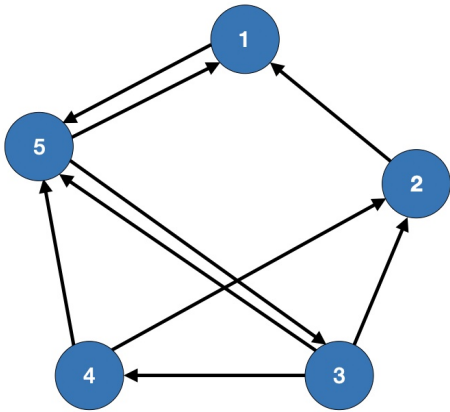


Figure 1:

Solution

Vertex	O_x	P(0)	P(1)	P(2)	P(3)	P(4)
1	1	0.2	0.27	0.0.2938	0.2595	0.26
2	1	0.2	0.176	0.127	0.131	0.134
3	3	0.2	0.13	0.17	0.17	0.169
4	2	0.2	0.106	0.09	0.099	0.099
5	2	0.2	0.316	0.316	0.312	0.316