

Algorithm – PageRank

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1: procedure PAGERANK(authors list, adjacency matrix)
2:    $U \leftarrow$  authors list
3:    $G \leftarrow$  adjacency matrix
4:    $p \leftarrow$  dumping factor
5:    $c \leftarrow \text{sum}(G,1)$ ,  $r \leftarrow \text{sum}(G,2)$ 
6:    $D \leftarrow \text{diag}(1./c)$ 
7:   Solve system  $(I - pGD)x = e$ 
8:    $x \leftarrow x/\text{sum}(x)$ 
9:    $x \leftarrow \text{sort}(x, \text{'descending'})$ 
10: return x
```
