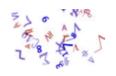


## TP

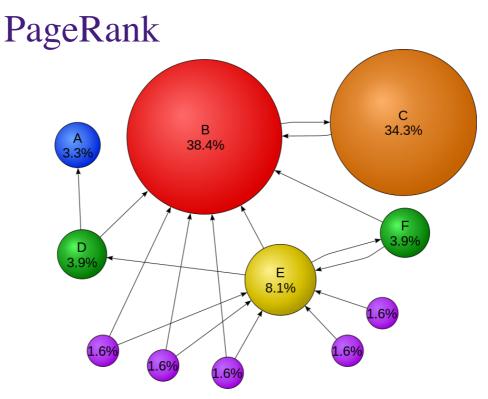
## PageRank

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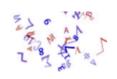




2







## PageRank

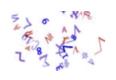
$$PR(u) = \sum_{v \in B_u} \frac{PR(v)}{L(v)}$$

• the PageRank value for a page u is dependent on the PageRank values for each page v contained in the set  $B_u$  (the set containing all pages linking to page u), divided by the number L(v) of links from page v.

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4



## Iterative algorithm

• At t=0, an initial probability distribution is assumed, usually:

 $PR(p_i;0) = \frac{1}{N}$ 

• At each time step t, the computation, as detailed above, yields:

$$PR(p_i; t+1) = \frac{1-d}{N} + d \sum_{p_j \in M(p_i)} \frac{PR(p_j; t)}{L(p_j)}$$

With residual probability usually set to d = 0.85

