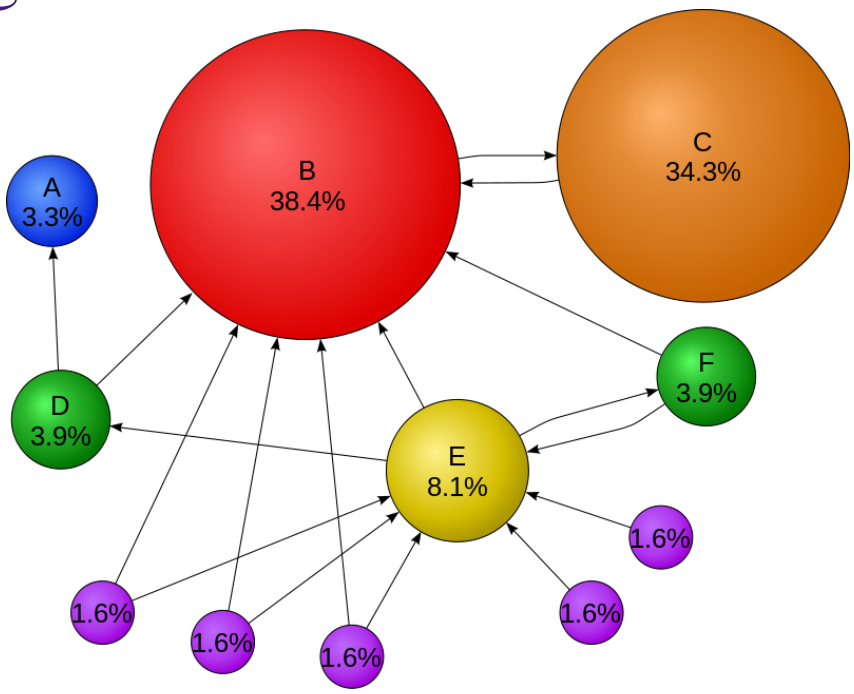
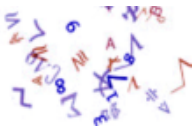
TP

PageRank

PageRank

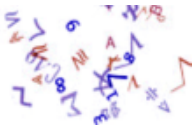




PageRank

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

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



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 $\boldsymbol{d} = 0.85$