

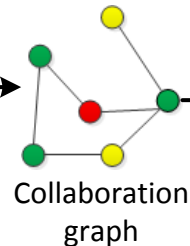
DBLP XML  
web server



Collaboration  
data (DBLP)

Filter weak  
nodes

Build  
collaboration  
graph



Target node

MVCWalker

Do some guidance when skipping to next node  
according to link importance:

$$\text{LIM}_{[t_1, t_2]}(p_i, p_j) = \sum_{t=t_1}^{t_2} \text{DCL}(p_i, p_j) * k(t)$$

Initialize values of  
every node (MR)

Skip to  
next node

Random  
Walk

Basic Random Walk

Equal probability to skip to the next node, which is  
defined as:

$$p_{i,j} = \frac{1}{N} \quad (N = \text{total number of neighbors of node } i)$$

Top N recommendation  
list

