

Notation	Description
p_{uv}	the probability of edge $e_{u,v}$
$p_r(u, v)$	the reachability probability from u to v
$p_i(u, v)$	the i^{th} path from u to v
r_{uv}	the sum of the paths from u to v
w_u	the weight of node u
$IVT(u)$	the influence value tree of u
$WDT(u)$	the weight discount tree of u
V_u	the value of node u
W_u	the value generated by u in u 's neighborhood
O_u	the set of successors of u
I_u	the set of predecessors of u
θ	bound parameter of BWR algorithm
α	steps which influence can propagate
β	performance bound of BWR