HYBRID APPROACH

class Mapper

method Map(docid a; doc d)

for all term w in doc d do

for all term u in Neighbors(w) do

Emit(pair (w; u); count 1)

class Reducer

method Initialize

wprev ← Ø,H ← new AssociativeArray

method Reduce(Pair(w, u), [c1, c2, …])

if (w ≠ wprev && wprev ≠ Ø) then

sum <- Sum(H) // sum of all values in H

H <- H/sum // element-wise division

Emit(term wprev, Sripe H), H.Reset()

total = 0;

for all c in [c1, c2, …] do

total += c

H{u} <- total,

wprev ← w

method Close

sum <- Sum(H) // sum of all values in H

H <- H/sum // element-wise division

Emit(term wprev, Sripe H),