

# Example of Rocchio Feedback

$V = \{\text{news about presidential camp. food ....}\}$

Query = "news about presidential campaign"

$O = (1, 1, 1, 1, 0, 0, \dots)$

New Query  $Q' = (\alpha*1 + \beta*1.5 - \gamma*1.5, \alpha*1 - \gamma*0.067, \alpha*1 + \beta*3.5, \alpha*1 + \beta*2.0 - \gamma*2.6, -\gamma*1.3, 0, 0, \dots)$

-  $D1 = (1.5, 0.1, 0, 0, 0, 0, \dots)$

D2

... news about organic food campaign...

-  $D2 = (1.5, 0.1, 0, 2.0, 2.0, 0, \dots)$

D3

... news of presidential campaign ...

+  $D3 = (1.5, 0, 3.0, 2.0, 0, 0, \dots)$

D4

+ Centroid Vector =  $((1.5+1.5)/2, 0, (3.0+4.0)/2, (2.0+2.0)/2, 0, 0, \dots)$   
 $= (1.5, 0, 3.5, 2.0, 0, 0, \dots)$

+  $D4 = (1.5, 0, 4.0, 2.0, 0, 0, \dots)$

- Centroid Vector =  $((1.5+1.5+1.5)/3, (0.1+0.1+0)/3, 0, (0+2.0+6.0)/3, (0+2.0+2.0)/3, 0, \dots)$   
 $= (1.5, 0.067, 0, 2.6, 1.3, 0, \dots)$

-  $D5 = (1.5, 0, 0, 6.0, 2.0, 0, \dots)$