

NDCG@27

1.2
1.0
0.8
0.6
0.4
0.2

0.28 **0.25** **0.18** **0.25** **0.26** **0.26** **0.25** **0.22** **0.25** **0.26** **0.26** **0.26** **0.25** **0.26** **0.26** **0.26** **0.25** **0.26** **0.26** **0.26** **0.26** **0.26** **0.26** **0.23** **0.26** **0.26** **0.27** **0.27** **0.21** **0.26** **0.27** **0.26** **0.27** **0.17** **0.15** **0.18** **0.20** **0.20**

Initial DCS GT 1 2 3 4 GAPI 1 2 3 4 BTN 1 2 3 4 NMS 1 2 3 4 IMP-P 1 2 3 4 IMP-A 1 2 3 4 CoT 1 2 3 4

Alternate Fair Ranking Methods as defined in Section IV