

# GRACE-SA1-4

## (1) Evaluation Result without Considering Links

Summary Statistics	
Run ID	GRACE-SA1-4
Subtask	II-A1
Relevant Level	Level1 (H or A)
Query Method	automatic
Topic Part	DISC only
Contents/Links Used	contents only
Number of Topics	45
Total number of documents over all topics	
Retrieved:	45000
Relevant:	521
Rel-ret:	431

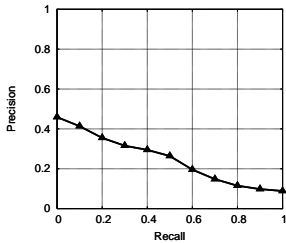
Summary Statistics	
Run ID	GRACE-SA1-4
Subtask	II-A1
Relevant Level	Level2 (H, A or B)
Query Method	automatic
Topic Part	DISC only
Contents/Links Used	contents only
Number of Topics	46
Total number of documents over all topics	
Retrieved:	46000
Relevant:	812
Rel-ret:	673

Recall Level Precision Averages	
Recall	Precision
0.00	0.4591
0.10	0.4136
0.20	0.3549
0.30	0.3156
0.40	0.2947
0.50	0.2638
0.60	0.1955
0.70	0.1478
0.80	0.1149
0.90	0.0979
1.00	0.0882
Average precision over all relevant documents	
non-interpolated	0.2365

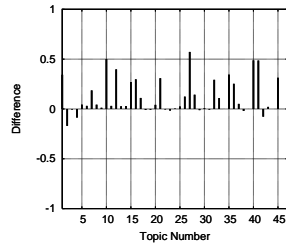
Document Level Averages	
	Precision
At 5 docs	0.2178
At 10 docs	0.1778
At 15 docs	0.1585
At 20 docs	0.1444
At 30 docs	0.1193
At 100 docs	0.0584
At 200 docs	0.0352
At 500 docs	0.0178
At 1000 docs	0.0096
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2474

Recall Level Precision Averages	
Recall	Precision
0.00	0.5328
0.10	0.4656
0.20	0.4092
0.30	0.3673
0.40	0.3259
0.50	0.2653
0.60	0.2020
0.70	0.1304
0.80	0.1032
0.90	0.0753
1.00	0.0603
Average precision over all relevant documents	
non-interpolated	0.2511

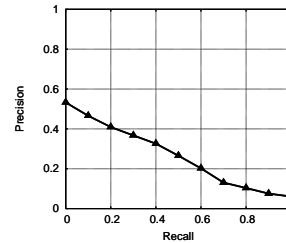
Document Level Averages	
	Precision
At 5 docs	0.3087
At 10 docs	0.2652
At 15 docs	0.2333
At 20 docs	0.2109
At 30 docs	0.1717
At 100 docs	0.0863
At 200 docs	0.0527
At 500 docs	0.0263
At 1000 docs	0.0146
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2590



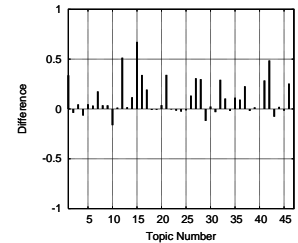
Recall-Precision Curve



Difference from Median in Average Precision per Topic (over 12 'automatic' and 'DISC only' runs)\*

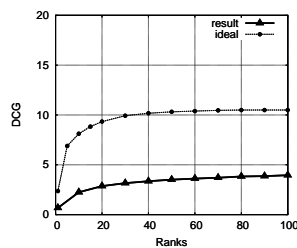


Recall-Precision Curve



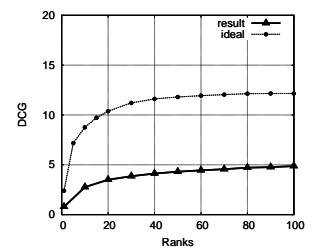
Difference from Median in Average Precision per Topic (over 12 'automatic' and 'DISC only' runs)\*\*

Discounted ( $\log_2$ ) Cummulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 0$ )	
	DCG
At 1 doc	0.6739
At 10 docs	2.2441
At 20 docs	2.8593
At 30 docs	3.1594
At 40 docs	3.3512
At 50 docs	3.5093
At 60 docs	3.6145
At 70 docs	3.7010
At 80 docs	3.8264
At 90 docs	3.8605
At 100 docs	3.9529
At 200 docs	4.2979
At 500 docs	4.7531
At 1000 docs	4.8934



Discounted Cummulative Gain Curve ( $G_S = 3, G_A = 2, G_B = 0$ )

Discounted ( $\log_2$ ) Cummulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 1$ )	
	DCG
At 1 doc	0.7826
At 10 docs	2.7601
At 20 docs	3.4977
At 30 docs	3.8545
At 40 docs	4.1223
At 50 docs	4.3079
At 60 docs	4.4431
At 70 docs	4.5584
At 80 docs	4.7083
At 90 docs	4.7661
At 100 docs	4.8684
At 200 docs	5.3171
At 500 docs	5.8668
At 1000 docs	6.0934



Discounted Cummulative Gain Curve ( $G_S = 3, G_A = 2, G_B = 1$ )

\* Topic Numbers: ( 1, 2, 3, 4, 5, 6, 7, 8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45 )  
 Topic IDs: ( 8,10,11,12,13,14,15,16,17,18,19,20,22,23,24,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,46,47,48,49,52,53,58,59,60,61,62,63 )

\*\* Topic Numbers: ( 1, 2, 3, 4, 5, 6, 7, 8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46 )  
 Topic IDs: ( 8,10,11,12,13,14,15,16,17,18,19,20,22,23,24,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,46,47,48,49,52,53,57,58,59,60,61,62,63 )

## (2) Evaluation Result with Considering Links

Summary Statistics	
Run ID	GRACE-SA1-4
Subtask	II-A1
Relevant Level	Level1 (H or A)
Query Method	automatic
Topic Part	DISC only
Contents/Links Used	contents only
Number of Topics	46
Total number of documents over all topics	
Retrieved:	46000
Relevant:	966
Rel-ret:	748

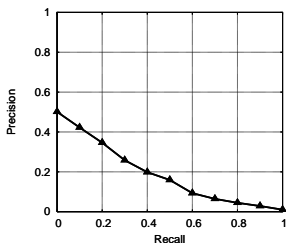
Summary Statistics	
Run ID	GRACE-SA1-4
Subtask	II-A1
Relevant Level	Level2 (H, A or B)
Query Method	automatic
Topic Part	DISC only
Contents/Links Used	contents only
Number of Topics	47
Total number of documents over all topics	
Retrieved:	47000
Relevant:	1381
Rel-ret:	1050

Recall Level Precision Averages	
Recall	Precision
0.00	0.5011
0.10	0.4225
0.20	0.3461
0.30	0.2583
0.40	0.1982
0.50	0.1591
0.60	0.0929
0.70	0.0643
0.80	0.0445
0.90	0.0283
1.00	0.0100
Average precision over all relevant documents	
non-interpolated	0.1731

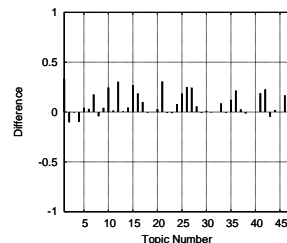
Document Level Averages	
	Precision
At 5 docs	0.2565
At 10 docs	0.2261
At 15 docs	0.2015
At 20 docs	0.1859
At 30 docs	0.1522
At 100 docs	0.0852
At 200 docs	0.0550
At 500 docs	0.0290
At 1000 docs	0.0163
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2075

Recall Level Precision Averages	
Recall	Precision
0.00	0.5778
0.10	0.4860
0.20	0.3802
0.30	0.2443
0.40	0.1951
0.50	0.1471
0.60	0.1000
0.70	0.0695
0.80	0.0481
0.90	0.0306
1.00	0.0079
Average precision over all relevant documents	
non-interpolated	0.1880

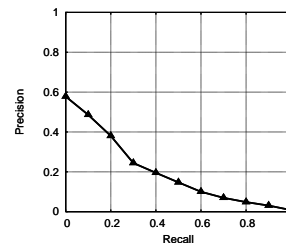
Document Level Averages	
	Precision
At 5 docs	0.3617
At 10 docs	0.3149
At 15 docs	0.2780
At 20 docs	0.2564
At 30 docs	0.2078
At 100 docs	0.1157
At 200 docs	0.0748
At 500 docs	0.0393
At 1000 docs	0.0223
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2167



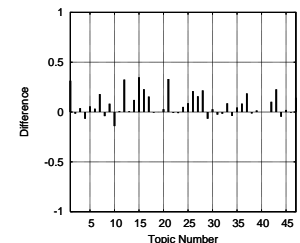
Recall-Precision Curve



Difference from Median in Average Precision per Topic (over 12 'automatic' and 'DISC only' runs)\*

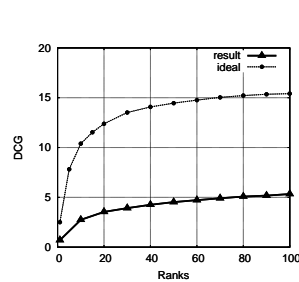


Recall-Precision Curve



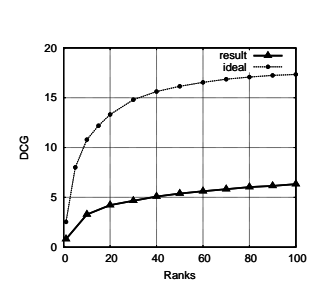
Difference from Median in Average Precision per Topic (over 12 'automatic' and 'DISC only' runs)\*\*

Discounted ( $\log_2$ ) Cummulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 1$ )	
	DCG
At 1 doc	0.7021
At 10 docs	2.7438
At 20 docs	3.5417
At 30 docs	3.9179
At 40 docs	4.2535
At 50 docs	4.5240
At 60 docs	4.7194
At 70 docs	4.9060
At 80 docs	5.0797
At 90 docs	5.1760
At 100 docs	5.3314
At 200 docs	6.0362
At 500 docs	6.9023
At 1000 docs	7.2810



Discounted Cummulative Gain Curve ( $G_S = 3, G_A = 2, G_B = 0$ )

Discounted ( $\log_2$ ) Cummulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 1$ )	
	DCG
At 1 doc	0.8085
At 10 docs	3.2809
At 20 docs	4.2206
At 30 docs	4.6567
At 40 docs	5.0789
At 50 docs	5.3802
At 60 docs	5.6122
At 70 docs	5.8201
At 80 docs	6.0280
At 90 docs	6.1475
At 100 docs	6.3254
At 200 docs	7.1645
At 500 docs	8.1843
At 1000 docs	8.6638



Discounted Cummulative Gain Curve ( $G_S = 3, G_A = 2, G_B = 1$ )

\* Topic Numbers: ( 1, 2, 3, 4, 5, 6, 7, 8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46 )

Topic IDs: ( 8,10,11,12,13,14,15,16,17,18,19,20,22,23,24,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,46,47,48,49,52,53,56,58,59,60,61,62,63 )

\*\* Topic Numbers: ( 1, 2, 3, 4, 5, 6, 7, 8, 9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47 )

Topic IDs: ( 8,10,11,12,13,14,15,16,17,18,19,20,22,23,24,27,28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,46,47,48,49,52,53,56,57,58,59,60,61,62,63 )