

# GRACE-SA2-1

## (1) Evaluation Result without Considering Links

Summary Statistics	
Run ID	GRACE-SA2-1
Subtask	II-A2
Relevant Level	Level1 (H or A)
Query Method	automatic
Topic Part	TITLE and RDOC[1]
Contents/Links Used	contents only
Number of Topics	45
Total number of documents over all topics	
Retrieved:	45000
Relevant:	521
Rel-ret:	449

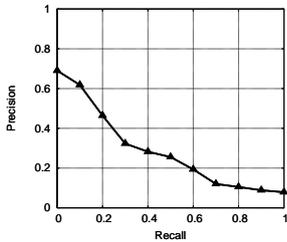
Summary Statistics	
Run ID	GRACE-SA2-1
Subtask	II-A2
Relevant Level	Level2 (H, A or B)
Query Method	automatic
Topic Part	TITLE and RDOC[1]
Contents/Links Used	contents only
Number of Topics	46
Total number of documents over all topics	
Retrieved:	46000
Relevant:	812
Rel-ret:	703

Recall Level Precision Averages	
Recall	Precision
0.00	0.6901
0.10	0.6184
0.20	0.4639
0.30	0.3232
0.40	0.2821
0.50	0.2554
0.60	0.1935
0.70	0.1202
0.80	0.1048
0.90	0.0884
1.00	0.0784
Average precision over all relevant documents	
non-interpolated	0.2754

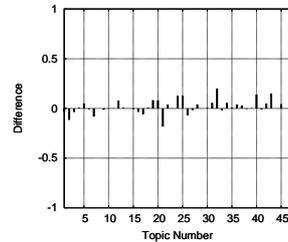
Document Level Averages	
	Precision
At 5 docs	0.2756
At 10 docs	0.2022
At 15 docs	0.1704
At 20 docs	0.1478
At 30 docs	0.1289
At 100 docs	0.0607
At 200 docs	0.0372
At 500 docs	0.0183
At 1000 docs	0.0100
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2562

Recall Level Precision Averages	
Recall	Precision
0.00	0.8352
0.10	0.6811
0.20	0.5108
0.30	0.4293
0.40	0.3452
0.50	0.3041
0.60	0.2546
0.70	0.1493
0.80	0.1280
0.90	0.0910
1.00	0.0695
Average precision over all relevant documents	
non-interpolated	0.3221

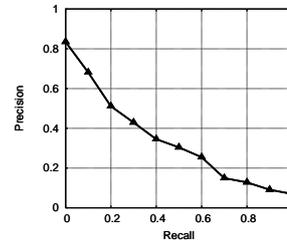
Document Level Averages	
	Precision
At 5 docs	0.3739
At 10 docs	0.2848
At 15 docs	0.2464
At 20 docs	0.2163
At 30 docs	0.1826
At 100 docs	0.0943
At 200 docs	0.0584
At 500 docs	0.0280
At 1000 docs	0.0153
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.3160



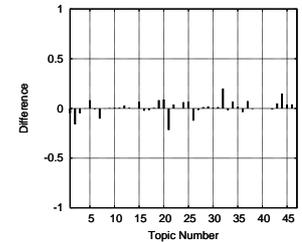
Recall-Precision Curve



Difference from Median in Average Precision per Topic (over 6 'automatic' and 'TITLE and RDOC[1]' runs)\*

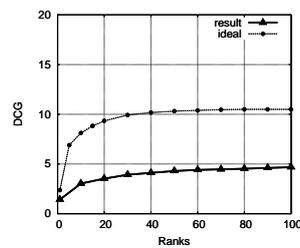


Recall-Precision Curve



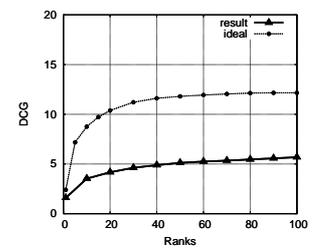
Difference from Median in Average Precision per Topic (over 6 'automatic' and 'TITLE and RDOC[1]' runs)\*\*

Discounted ( $\log_2$ ) Cummulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 0$ )	
	DCG
At 1 doc	1.4130
At 10 docs	3.0297
At 20 docs	3.5236
At 30 docs	3.9179
At 40 docs	4.1023
At 50 docs	4.2919
At 60 docs	4.4047
At 70 docs	4.4623
At 80 docs	4.5254
At 90 docs	4.6001
At 100 docs	4.6730
At 200 docs	5.0702
At 500 docs	5.4784
At 1000 docs	5.6505



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	1.5870
At 10 docs	3.5263
At 20 docs	4.1665
At 30 docs	4.6167
At 40 docs	4.8809
At 50 docs	5.1142
At 60 docs	5.2457
At 70 docs	5.3392
At 80 docs	5.4545
At 90 docs	5.5665
At 100 docs	5.6792
At 200 docs	6.2023
At 500 docs	6.6921
At 1000 docs	6.9125



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-SA2-1
Subtask	II-A2
Relevant Level	Level1 (H or A)
Query Method	automatic
Topic Part	TITLE and RDOC[1]
Contents/Links Used	contents only
Number of Topics	46
Total number of documents over all topics	
Retrieved:	46000
Relevant:	966
Rel-ret:	796

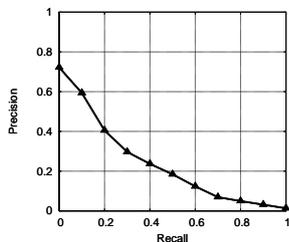
Summary Statistics	
Run ID	GRACE-SA2-1
Subtask	II-A2
Relevant Level	Level2 (H, A or B)
Query Method	automatic
Topic Part	TITLE and RDOC[1]
Contents/Links Used	contents only
Number of Topics	47
Total number of documents over all topics	
Retrieved:	47000
Relevant:	1381
Rel-ret:	1124

Recall Level Precision Averages	
Recall	Precision
0.00	0.7216
0.10	0.5936
0.20	0.4050
0.30	0.2966
0.40	0.2367
0.50	0.1840
0.60	0.1235
0.70	0.0691
0.80	0.0494
0.90	0.0314
1.00	0.0131
Average precision over all relevant documents	
non-interpolated	0.2179

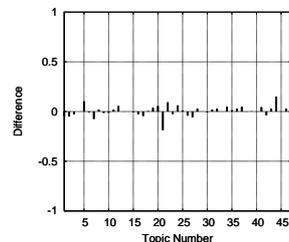
Document Level Averages	
	Precision
At 5 docs	0.3435
At 10 docs	0.2717
At 15 docs	0.2319
At 20 docs	0.2087
At 30 docs	0.1841
At 100 docs	0.1002
At 200 docs	0.0639
At 500 docs	0.0312
At 1000 docs	0.0173
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2494

Recall Level Precision Averages	
Recall	Precision
0.00	0.8552
0.10	0.6373
0.20	0.4675
0.30	0.3533
0.40	0.2465
0.50	0.1901
0.60	0.1416
0.70	0.0948
0.80	0.0645
0.90	0.0325
1.00	0.0130
Average precision over all relevant documents	
non-interpolated	0.2519

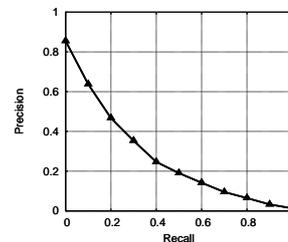
Document Level Averages	
	Precision
At 5 docs	0.4468
At 10 docs	0.3596
At 15 docs	0.3163
At 20 docs	0.2819
At 30 docs	0.2411
At 100 docs	0.1406
At 200 docs	0.0896
At 500 docs	0.0431
At 1000 docs	0.0239
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2721



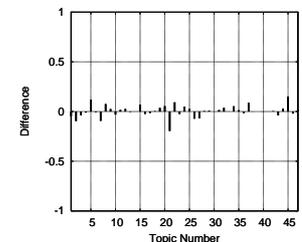
Recall-Precision Curve



Difference from Median in Average Precision per Topic (over 6 'automatic' and 'TITLE and RDOC[1]' runs)\*

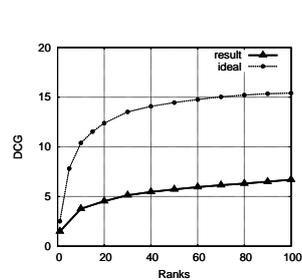


Recall-Precision Curve



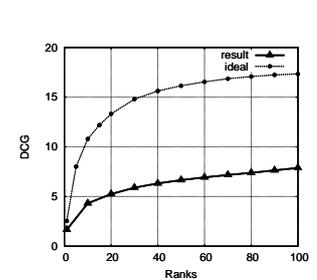
Difference from Median in Average Precision per Topic (over 6 'automatic' and 'TITLE and RDOC[1]' runs)\*\*

Discounted ( $\log_2$ ) Cummulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 1$ )	
	DCG
At 1 doc	1.4894
At 10 docs	3.7689
At 20 docs	4.5348
At 30 docs	5.1293
At 40 docs	5.4618
At 50 docs	5.7207
At 60 docs	5.9487
At 70 docs	6.1459
At 80 docs	6.3101
At 90 docs	6.4958
At 100 docs	6.6967
At 200 docs	7.4866
At 500 docs	8.1675
At 1000 docs	8.5307



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	1.6596
At 10 docs	4.3171
At 20 docs	5.2445
At 30 docs	5.8939
At 40 docs	6.3217
At 50 docs	6.6543
At 60 docs	6.9299
At 70 docs	7.1693
At 80 docs	7.3881
At 90 docs	7.6366
At 100 docs	7.8797
At 200 docs	8.8312
At 500 docs	9.6227
At 1000 docs	10.0557



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 )