

# GRACE-SA2-4

## (1) Evaluation Result without Considering Links

Summary Statistics	
Run ID	GRACE-SA2-4
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:	446

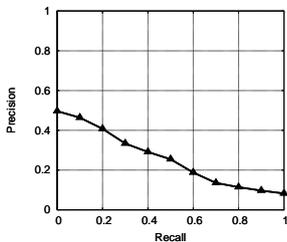
Summary Statistics	
Run ID	GRACE-SA2-4
Subtask	II-A2
Relevant Level	Level2 (H, A or B)
Query Method	automatic
Topic Part	TITLE and RDOC[1]
Contents/Links Used	contents only
Number of Topics	46
Total number of documents over all topics	
Retrieved:	46000
Relevant:	812
Rel-ret:	713

Recall Level Precision Averages	
Recall	Precision
0.00	0.4964
0.10	0.4638
0.20	0.4075
0.30	0.3337
0.40	0.2910
0.50	0.2543
0.60	0.1877
0.70	0.1353
0.80	0.1140
0.90	0.0966
1.00	0.0823
Average precision over all relevant documents	
non-interpolated	0.2465

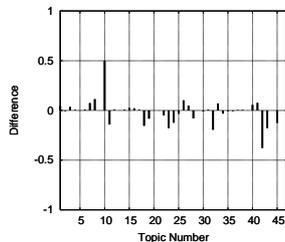
Document Level Averages	
	Precision
At 5 docs	0.2844
At 10 docs	0.2133
At 15 docs	0.1793
At 20 docs	0.1656
At 30 docs	0.1311
At 100 docs	0.0662
At 200 docs	0.0392
At 500 docs	0.0184
At 1000 docs	0.0099
R-Precision (precision after R docs retrieved (where R is the number of relevant documents))	
Exact	0.2501

Recall Level Precision Averages	
Recall	Precision
0.00	0.5774
0.10	0.5186
0.20	0.4538
0.30	0.3834
0.40	0.3254
0.50	0.2855
0.60	0.2305
0.70	0.1530
0.80	0.1275
0.90	0.0768
1.00	0.0510
Average precision over all relevant documents	
non-interpolated	0.2755

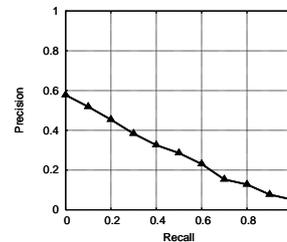
Document Level Averages	
	Precision
At 5 docs	0.3696
At 10 docs	0.2957
At 15 docs	0.2493
At 20 docs	0.2315
At 30 docs	0.1862
At 100 docs	0.0996
At 200 docs	0.0605
At 500 docs	0.0288
At 1000 docs	0.0155
R-Precision (precision after R docs retrieved (where R is the number of relevant documents))	
Exact	0.2887



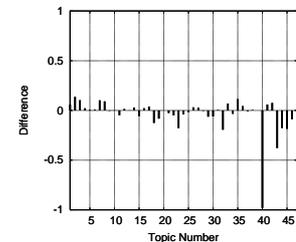
Recall-Precision Curve



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

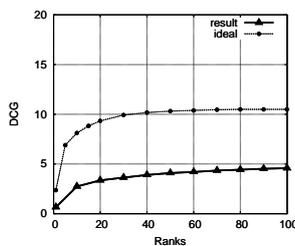


Recall-Precision Curve



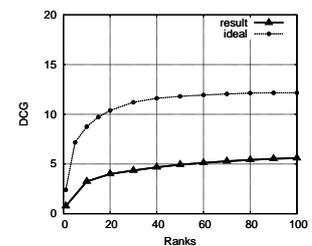
Difference from Median in Average Precision per Topic (over 6 'automatic' and 'TITLE and RDOC[1]' runs)\*\*

Discounted ( $\log_2$ ) Cumulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 0$ )	
	DCG
At 1 doc	0.6522
At 10 docs	2.7359
At 20 docs	3.3515
At 30 docs	3.6312
At 40 docs	3.8921
At 50 docs	4.0904
At 60 docs	4.1962
At 70 docs	4.3369
At 80 docs	4.4244
At 90 docs	4.5193
At 100 docs	4.5722
At 200 docs	4.9082
At 500 docs	5.2271
At 1000 docs	5.3848



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

Discounted ( $\log_2$ ) Cumulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 1$ )	
	DCG
At 1 doc	0.7609
At 10 docs	3.2424
At 20 docs	3.9922
At 30 docs	4.3464
At 40 docs	4.6709
At 50 docs	4.9326
At 60 docs	5.1096
At 70 docs	5.2791
At 80 docs	5.4084
At 90 docs	5.5269
At 100 docs	5.5898
At 200 docs	6.0612
At 500 docs	6.4991
At 1000 docs	6.6985



Discounted Cumulative 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-SA2-4
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:	786

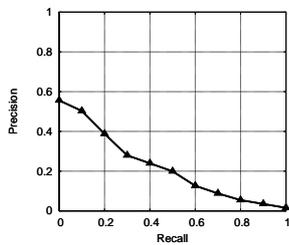
Summary Statistics	
Run ID	GRACE-SA2-4
Subtask	II-A2
Relevant Level	Level2 (H, A or B)
Query Method	automatic
Topic Part	TITLE and RDOC[1]
Contents/Links Used	contents only
Number of Topics	47
Total number of documents over all topics	
Retrieved:	47000
Relevant:	1381
Rel-ret:	1131

Recall Level Precision Averages	
Recall	Precision
0.00	0.5559
0.10	0.5027
0.20	0.3878
0.30	0.2795
0.40	0.2396
0.50	0.1991
0.60	0.1263
0.70	0.0878
0.80	0.0543
0.90	0.0349
1.00	0.0153
Average precision over all relevant documents	
non-interpolated	0.2061

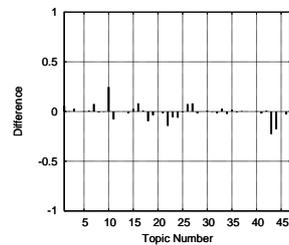
Document Level Averages	
	Precision
At 5 docs	0.3391
At 10 docs	0.2739
At 15 docs	0.2319
At 20 docs	0.2130
At 30 docs	0.1710
At 100 docs	0.0965
At 200 docs	0.0632
At 500 docs	0.0314
At 1000 docs	0.0171
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2351

Recall Level Precision Averages	
Recall	Precision
0.00	0.6371
0.10	0.5608
0.20	0.4314
0.30	0.3075
0.40	0.2414
0.50	0.2046
0.60	0.1450
0.70	0.1119
0.80	0.0811
0.90	0.0383
1.00	0.0125
Average precision over all relevant documents	
non-interpolated	0.2315

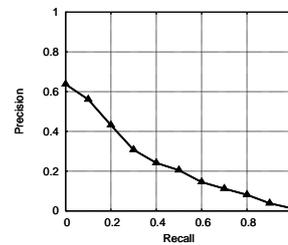
Document Level Averages	
	Precision
At 5 docs	0.4298
At 10 docs	0.3553
At 15 docs	0.3035
At 20 docs	0.2798
At 30 docs	0.2312
At 100 docs	0.1351
At 200 docs	0.0886
At 500 docs	0.0444
At 1000 docs	0.0241
R-Precision (precision after R docs retrieved (where R is the number of relevant documnets))	
Exact	0.2492



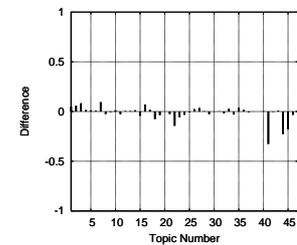
Recall-Precision Curve



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

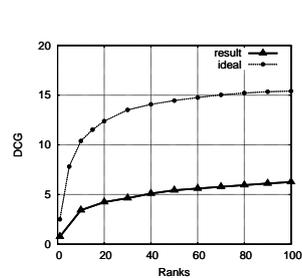


Recall-Precision Curve



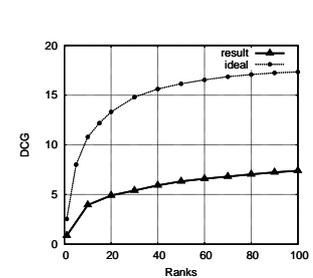
Difference from Median in Average Precision per Topic (over 6 'automatic' and 'TITLE and RDOC[1]' runs)\*\*

Discounted ( $\log_2$ ) Cummulative Gain Averages ( $G_S = 3, G_A = 2, G_B = 1$ )	
	DCG
At 1 doc	0.7660
At 10 docs	3.4232
At 20 docs	4.2418
At 30 docs	4.6341
At 40 docs	5.0973
At 50 docs	5.4312
At 60 docs	5.6083
At 70 docs	5.7778
At 80 docs	5.9487
At 90 docs	6.1179
At 100 docs	6.2571
At 200 docs	7.0867
At 500 docs	7.8341
At 1000 docs	8.1387



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	0.8723
At 10 docs	3.9444
At 20 docs	4.9058
At 30 docs	5.4032
At 40 docs	5.9248
At 50 docs	6.3285
At 60 docs	6.5899
At 70 docs	6.8086
At 80 docs	7.0343
At 90 docs	7.2367
At 100 docs	7.3952
At 200 docs	8.4078
At 500 docs	9.3337
At 1000 docs	9.6928



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 )