

Number of profile - reranking combinations investigated: **15890**

Number of profile - reranking combination better than Google: **4455**

Number of profile - reranking significantly (0.05) better than Google: **3060**

Number of profile - reranking significantly (0.01) better than Google: **1748**

Number of profile - reranking combination better than Google for all users: **1556**

Number of profile - reranking combination better than Teevan: **3335**

Number of profile - reranking combination better than Teevan for all users: **413**

Number of profile - reranking combination better than PClick: **1580**

Number of profile - reranking combination better than PClick for all users: **359**

Best profile - reranking combination(s) based on average NDCG:

Method	Average NDCG	Improvement over Google	Improvement over Teevan	Queries Improved
TFxIDF, RTitle, RMKeyw, RCCParse, Gfilt - LM, Look At Rank, Visited	0.573	14.143%	10.618%	48 / 72
TFxIDF, RTitle, RMKeyw, RCCParse, NoFilt - LM, Look At Rank, Visited	0.573	14.143%	10.618%	48 / 72
TF, RMDescr, RTerms, WNFilt - LM, Look At Rank, Visited	0.573	14.143%	10.618%	44 / 72

Best profile - reranking combination(s) based on improved number of queries:

Method	Average NDCG	Queries Improved
TF, RTerms, RCCParse, NoFilt - LM, Look At Rank, Visited	0.567	52 / 72

Different values for the different parameters and their influence in the profiles better than Teevan:

Weighting method	Total	Average rank	Average score	Best rank
TF	1134	1580	0.543	3
TFxIDF	1129	1744	0.542	1
BM25	1072	1680	0.539	7
Filtering method	Total	Average rank	Average score	Best rank
No	1150	1613	0.541	2
Google NGram	1101	1667	0.541	1
WordNet	1084	1725	0.541	3
Plain text	Total	Average rank	Average score	Best rank

No	1783	1651	0.541	1
Yes	776	1747	0.541	98
Relative	776	1625	0.541	96
<b>Title</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	1609	1681	0.541	3
Yes	865	1723	0.541	5
Relative	861	1586	0.542	1
<b>Meta description</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	1635	1671	0.541	1
Yes	853	1741	0.541	5
Relative	847	1587	0.542	3
<b>Meta keywords</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	1631	1672	0.541	3
Yes	852	1724	0.541	6
Relative	852	1602	0.542	1
<b>Terms</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	1639	1692	0.541	1
Yes	849	1698	0.541	5
Relative	847	1589	0.542	3
<b>CCParse</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	1711	1691	0.541	3
Yes	814	1689	0.541	6
Relative	810	1596	0.542	1
<b>Reranking method</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
LM	2032	1306	0.547	1
Matching	58	2804	0.526	1266
UMatching	110	2794	0.5273363636363636	1322
PClick	1135	2148	0.533	1581
<b>Extra weight to visited URLs</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
Yes (* 10)	2433	1461	0.544	1
No	902	2224	0.533	758

<b>Keep Google rank into account</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
Yes (* 10)	3333	1668	0.541	1
No	2	1393	0.537	1392

Different values for the different parameters and their influence in the profiles consistently better than Teevan:

<b>Weighting method</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
TF	218	205	0.558	3
TFxIDF	51	124	0.563	1
BM25	144	238	0.557	5
<b>Filtering method</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	166	208	0.558	2
Google NGram	163	228	0.557	1
WordNet	84	162	0.561	3
<b>Plain text</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	297	201	0.558	1
Yes	55	255	0.557	170
Relative	61	189	0.560	78
<b>Title</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	141	215	0.558	3
Yes	119	218	0.558	6
Relative	153	190	0.559	1
<b>Meta description</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	188	207	0.558	1
Yes	104	215	0.558	6
Relative	121	198	0.558	3
<b>Meta keywords</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	208	208	0.558	3
Yes	91	223	0.558	12
Relative	114	190	0.559	1
<b>Terms</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>

No	177	226	0.558	1
Yes	103	206	0.558	21
Relative	133	181	0.559	3
<b>CCParse</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
No	170	182	0.559	3
Yes	101	236	0.557	21
Relative	142	215	0.558	1
<b>Reranking method</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
LM	413	207	0.558	1
Matching	0	N/A	N/A	0
UMatching	0	N/A	N/A	0
PClick	0	N/A	N/A	0
<b>Extra weight to visited URLs</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
Yes (* 10)	358	179	0.561	1
No	55	385	0.544	337
<b>Keep Google rank into account</b>	<b>Total</b>	<b>Average rank</b>	<b>Average score</b>	<b>Best rank</b>
Yes (* 10)	413	207	0.558	1
No	0	N/A	N/A	0

Varying one parameter:

<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
TF	TFxIDF	0.430	1068	0.434	3253
TF	BM25	0.430	1837	0.444	2663
TFxIDF	BM25	0.434	1883	0.444	2619
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
No Filtering	Google NGram Filtering	0.443	2747	0.442	612
No Filtering	WordNet Filtering	0.443	3767	0.424	706
WordNet Filtering	Google NGram Filtering	0.424	851	0.442	3594
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>

Plain Text	No Plain Text	0.423	362	0.449	2964
Relative Plain Text	No Plain Text	0.426	344	0.449	2978
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
Title	No Title	0.436	1341	0.435	866
Relative Title	No Title	0.437	1597	0.436	861
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
Metadescription	No Metadescription	0.435	1240	0.436	1017
Relative Metadescription	No Metadescription	0.437	1499	0.438	1139
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
Metakeywords	No Metakeywords	0.436	1548	0.435	585
Relative Metakeywords	No Metakeywords	0.438	1965	0.436	620
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
Terms	No Terms	0.437	1606	0.434	890
Relative Terms	No Terms	0.439	1920	0.435	767
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
CCParse	No CCParse	0.435	1516	0.436	1420
Relative CCParse	No CCParse	0.437	1576	0.437	1391
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
Matching	Unique Matching	0.389	1184	0.400	3241
Matching	LM	0.389	6	0.480	4531
Matching	PClick	0.463	62	0.516	2202
Unique Matching	LM	0.400	11	0.480	4527
Unique Matching	PClick	0.477	171	0.516	2082
LM	PClick	0.543	2260	0.516	10
<b>Parameter 1</b>	<b>Parameter 2</b>	<b>Average 1</b>	<b>Better</b>	<b>Average 2</b>	<b>Better</b>
Extra Weight to Visited URLs	No Extra Weight to Visited URLs	0.448	6785	0.425	1

Parameter 1	Parameter 2	Average 1	Better	Average 2	Better
Keep rank into account	No Keep rank into account	0.494	6804	0.351	0

Input combinations and their average scores:

Combination	Average Score
RTitle RMetakeywords RTerms	0.460
Title Metakeywords Terms	0.459
RTitle RMetakeywords	0.457
Title Terms	0.457
Title Metakeywords	0.456
RTitle RTerms	0.456
Metadescription Metakeywords Terms	0.455
RMetadescription RMetakeywords RTerms	0.455
RMetakeywords RTerms	0.455
Title Metadescription Metakeywords Terms	0.454
Metakeywords	0.454
RMetakeywords	0.454
RTitle RMetadescription RMetakeywords RTerms	0.453
Metadescription Terms	0.453
Metakeywords Terms	0.453
Title Metadescription Terms	0.452
RMetadescription RTerms	0.451
RTitle RMetadescription RTerms	0.450
RMetakeywords RCCParse	0.450
RMetadescription RMetakeywords RTerms RCCParse	0.450
RTitle RMetakeywords RTerms RCCParse	0.450
Metadescription Metakeywords Terms CCParse	0.449
RMetakeywords RTerms RCCParse	0.449
Metadescription Metakeywords CCParse	0.449
RTitle RMetadescription RMetakeywords RTerms RCCParse	0.449

RTitle RMetakeywords RCCParse	0.449
Metadescription Terms CCParse	0.448
RMetadescription RTerms RCCParse	0.448
Title Metadescription Metakeywords Terms CCParse	0.448
Metakeywords CCParse	0.448
Title Metadescription Metakeywords CCParse	0.448
RMetadescription RMetakeywords RCCParse	0.448
RTitle RMetadescription RMetakeywords	0.448
RTitle	0.448
Title Metadescription Terms CCParse	0.448
Title	0.447
Title Metakeywords CCParse	0.447
Metadescription CCParse	0.447
Title Metadescription CCParse	0.447
Title Metakeywords Terms CCParse	0.447
Title Metadescription Metakeywords	0.447
RTitle RTerms RCCParse	0.447
RTitle RMetadescription RTerms RCCParse	0.447
RTitle RMetadescription RMetakeywords RCCParse	0.447
Metakeywords Terms CCParse	0.446
RTerms RCCParse	0.446
Title Terms CCParse	0.446
RMetadescription RCCParse	0.446
Title CCParse	0.446
RTitle RMetadescription RCCParse	0.446
Terms CCParse	0.445
RTitle RCCParse	0.445
Terms	0.445
RTerms	0.444
RTitle RMetadescription	0.444

CCParse	0.444
Title Metadescription	0.443
RCCParse	0.443
RMetadescription RMetakeywords	0.443
Metadescription Metakeywords	0.442
RMetadescription	0.434
Metadescription	0.433
RTitle RMetadescription RMetakeywords RText RTerms RCCParse	0.429
RMetadescription RMetakeywords RText RTerms RCCParse	0.428
RTitle RMetakeywords RText RTerms RCCParse	0.428
RTitle RMetadescription RText RTerms RCCParse	0.428
RMetakeywords RText RTerms RCCParse	0.428
RMetadescription RText RTerms RCCParse	0.428
RTitle RText RTerms RCCParse	0.427
RText RTerms RCCParse	0.427
RTitle RMetadescription RMetakeywords RText RCCParse	0.427
RTitle RMetadescription RMetakeywords RText RTerms	0.427
RTitle RMetakeywords RText RTerms	0.426
RTitle RMetakeywords RText RCCParse	0.426
RMetadescription RMetakeywords RText RTerms	0.426
RMetadescription RMetakeywords RText RCCParse	0.426
RTitle RMetadescription RText RCCParse	0.426
RTitle RMetadescription RText RTerms	0.426
RMetakeywords RText RCCParse	0.426
RTitle RText RTerms	0.425
RMetakeywords RText RTerms	0.425
RMetadescription RText RCCParse	0.425
RTitle RText RCCParse	0.425
RMetadescription RText RTerms	0.425
RText RCCParse	0.425
Title Metadescription Metakeywords Text Terms CCParse	0.424



RTitle RMetadescription RMetakeywords RText	0.424
RText RTerms	0.424
Title Metadescription Text Terms CCParse	0.424
Metadescription Metakeywords Text Terms CCParse	0.424
Title Metakeywords Text Terms CCParse	0.424
Metadescription Text Terms CCParse	0.424
Metakeywords Text Terms CCParse	0.424
Title Text Terms CCParse	0.424
Text Terms CCParse	0.424
Title Metadescription Text CCParse	0.424
Metadescription Metakeywords Text CCParse	0.424
Metakeywords Text CCParse	0.424
Title Metakeywords Text CCParse	0.423
Title Metadescription Metakeywords Text CCParse	0.423
RTitle RMetakeywords RText	0.423
RMetadescription RMetakeywords RText	0.423
Metadescription Text CCParse	0.423
Title Text CCParse	0.423
Text CCParse	0.423
RTitle RMetadescription RText	0.423
Title Metakeywords Text Terms	0.423
Title Metadescription Metakeywords Text Terms	0.423
Metakeywords Text Terms	0.422
RMetakeywords RText	0.422
Metadescription Metakeywords Text Terms	0.422
Title Text Terms	0.422
RTitle RText	0.422
Title Metadescription Text Terms	0.422
RMetadescription RText	0.422
Metadescription Text Terms	0.422

Text Terms	0.422
Title Metadescription Metakeywords Text	0.422
Metadescription Metakeywords Text	0.422
Title Metakeywords Text	0.422
Title Metadescription Text	0.422
Metakeywords Text	0.422
Metadescription Text	0.421
Title Text	0.421
RText	0.421
Text	0.421