



# INFORMATION RETRIEVAL FACILITY

IRF Report 2010-00002

Date: 2010-07-23

## **CLEF-IP 2009: Evaluation Summary – Part Two**

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**ABSTRACT:** This document presents a summary of the evaluation activities that were carried out for CLEF-IP 2009 track, with respect to 12 specific topics. The data from the 70 submitted runs was preprocessed and grouped into bundles according to experiment size and task. For each experiment we computed precision and recall at various levels, and map measures.

# CLEF-IP 2009: Evaluation Summary – Part Two

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July 23, 2010



## Abstract

This document presents a summary of the evaluation activities that were carried out for CLEF-IP 2009 track, with respect to 12 specific topics. The data from the 70 submitted runs was preprocessed and grouped into bundles according to experiment size and task. For each experiment we computed precision and recall at various levels, and map measures.

## 1 Further Evaluations at CLEF-IP 2009

In this report we present the results of run evaluations for a set of 12 topics. The 70 runs used for these evaluations were submitted by fourteen different teams corresponding to fifteen different participating institutions (see Table 1).

For each experiment we computed 9 standard IR measures:

~> Precision, Precision@5, Precision@10, Precision@100

~> Recall, Recall@5, Recall@10, Recall@100

~> MAP

The values shown in this evaluation report are computed with `trec_eval`<sup>1</sup>.

Table 1: List of active participants and runs submitted

ID	Institution	Tasks	Sizes	Runs
TUD	Tech. Univ. Darmstadt, Dept. of CS, DE Ubiquitous Knowledge Processing Lab	Main, EN, DE, FR	S(4), M(4), L(4), XL(4)	16
UniNE	Univ. Neuchatel - Computer Science CH	Main	S(7), XL(1)	8
uscom	Santiago de Compostela Univ. - Dept. ES Electronica y Computacion	Main	S(8)	8
UTASICS	University of Tampere - Info Studies FI & Interactive Media and Swedish In- SE stitute of Computer Science	Main	XL(8)	8
clefip-ug	Glasgow Univ. - IR Group Keith UK	Main	M(4), XL(1)	5
clefip-unige	Geneva Univ. - Centre Universitaire CH d'Informatique	Main	XL(5)	5
cwi	Centrum Wiskunde & Informatica - NL Interactive Information Access	Main	M(1), XL(4)	4
hcuge	Geneva Univ. Hospitals - Service of CH Medical Informatics	Main, EN, DE, FR	M(3), XL(1)	4
humb	Humboldt Univ. - Dept. of German DE Language and Linguistics	Main, EN, DE, FR	XL(4)	4
clefip-dcu	Dublin City Univ. - School of IR Computing	Main	XL(3)	3
clefip-run	Radboud Univ. Nijmegen - Centre NL for Language Studies & Speech Technologies	Main, EN	S(2)	2

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<sup>1</sup>[http://trec.nist.gov/trec\\_eval](http://trec.nist.gov/trec_eval)

Table 1: List of active participants and runs submitted

ID	Institution	Tasks	Sizes	Runs
Hildesheim	Hildesheim Univ. - Inst. of Informa- DE tion Systems & Nat. Lang. Processing	Main	S(1)	1
NLEL	Technical Univ. Valencia - Natural ES Langugage Engineering	Main	S(1)	1
UAIC	AI. I. Cuza University of Iasi - Natural RO Language Processing	EN	S(1)	1

## 2 Selection of Topic Patents, Data Preprocessing

For this round of evaluations we have been collaborating with volunteering experts in intellectual property. Each patent expert agreed to assess retrieval results for up to four patents in their own area of expertise. Each expertise area was communicated to us as an IPC code. Therefore, the twelve selected patents (see Table 2) are not randomly extracted from the CLEF-IP topic sets (Small, Medium, Large, eXtra Large), but selected depending on their IPC code, with a preference for those with a higher number of recorded citations.

Table 2: Topics manually assessed by patent experts

ID	Patent	IPC codes	Citations	In Topic Set
1	EP1421078	A61K, C07D, A61P	12	S
2	EP1278338	H04L, G05B, H04Q	5	S
3	EP1133104	G06F, H04L, H04N, H04B, H04M	8	S
4	EP1236569	B41N, C08L, B41C, C08K, G03F	3	S
5	EP1333887	A61K, A61P	4	S
6	EP1314753	B32B, C08K, E04B, C08J, C09J	3	S
7	EP1130071	C08L, C08F, C09J	12	M
8	EP1255138	G02B	4	M
9	EP1297752	A23D, C11B, A21D, A23L, C11C	3	XL
10	EP1175873	A61C	3	XL
11	EP1149535	A23F	3	XL
12	EP1333726	A23F, A23L	5	XL

Before computing retrieval efficiency measures, we filtered the submitted experiments to contain only the results for the 12 topics. Then, using a similar process to the one described in [1], we’ve created three evaluation bundles: one for experiments that contain retrieve results for topics 1 to 6; a second one for experiments with results for topics 1 to 8; and a third one for the experiments with retrieval results for all the 12 topics. Not only for convenience, we use the same S, M, and XL bundle names as in the first evaluation summary [1].<sup>2</sup> The list of (filtered) experiments in the resulting bundles are the same as in [1], Section 2, and we do not reproduce them here.

Section 4 shows the evaluation results grouped by S, M, and XL bundles of runs.

## 3 Assessments

### 3.1 Manual Relevance Assessments

To record the assessments done by the volunteering patent experts, we have used a customised version of the web platform system used by TREC ‘Legal Track’ since 2007<sup>3</sup>. Upon login, the system allowed an IP expert to select the patent topic to assess, to inspect each retrieved patent, and mark its relevancy. However, only a few patent experts used the provided systems. Most of

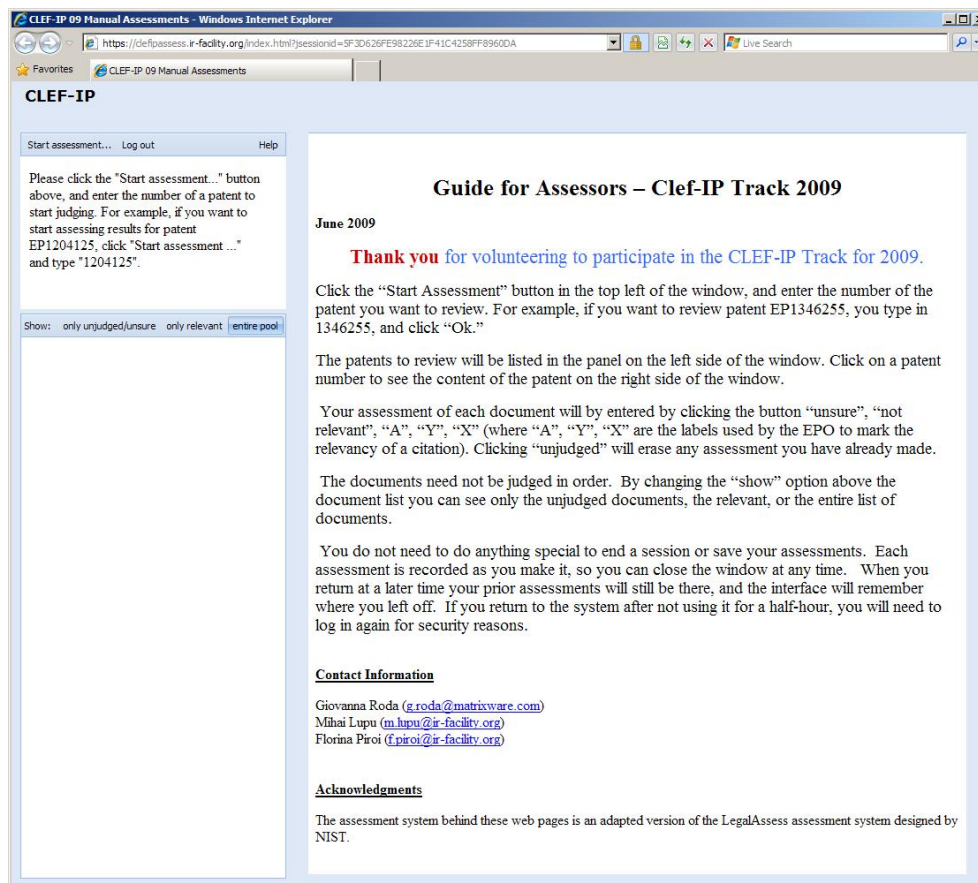
<sup>2</sup>The ‘S’, ‘M’, ‘XL’ bundle names also reflect the fact that topics 1 to 6 are to be found in the Small topic set, topics 1 to 8 in the Medium topic set, and topics 1 to 12 in the eXtra Large topic set.

<sup>3</sup>The web platform has been originally designed by Ian Soboroff, at NIST.

them preferred using their own system for doing assessments. Therefore, we have provided them with text files of the documents to assess, and they sent us back the results of their assessments.

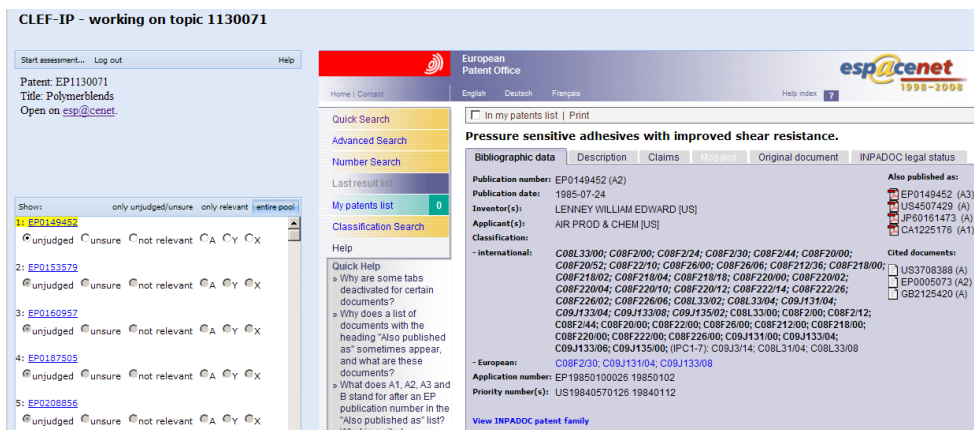
In average, each expert had to assess 264 results per topic, which correspond to a pooling up to rank 20 of the experimental data. The original relevance levels an assessor could assign were:

Figure 1: Assessment system after login.



'unsure', 'not relevant', 'A' (background information), 'X' (invalidating one or more claims), or 'Y' (combined with other references, invalidating one or more claims). As, according to the IP experts, a decision whether a document is 'X' or 'Y'-relevant for a given topic is time consuming, we have later agreed that they would use only 'not relevant' and 'A' (or 'relevant') for the assessments.

Figure 2: Assessing one topic patent.



The screenshot shows the CLEF-IP interface for assessing patent EP1130071. The main content area displays the patent title 'Pressure sensitive adhesives with improved shear resistance.' and its bibliographic data, including the publication number EP0149452 (A2), publication date 1985-07-24, inventor LENNEY WILLIAM EDWARD [US], and applicant AIR PROD & CHEM [US]. The interface also shows a list of international and European classification codes, such as C08L33/00, C08F20/00, and C08F22/00. The left sidebar contains search filters and a list of results, with the first result being EP0149452.

## 4 Measurements

In this section we present the values of the measures mentioned in Section 1 for all run files grouped by task and size.

### 4.1 Main Task

Table 3: Measures for bundle S, task Main

run id	P	R	MAP
clefip-dcu_baseline	0.0092	0.5957	0.0615
clefip-dcu_Filtered2	0.0085	0.579	0.0729
clefip-dcu_Filtered	0.0082	0.5594	0.0501
clefip-run_ClaimsBOW	0.0217	0.1971	0.0174
clefip-ug_bm25medstandard	0.	0.	0.
clefip-ug_infdocfreqBM25EnglishTerms	0.	0.	0.
clefip-ug_infdocfreqBM25FrenchTermsNew	0.	0.	0.
clefip-ug_infdocfreqBM25GermanTerms	0.	0.	0.
clefip-ug_infdocfreqCosEnglishTerms	0.0075	0.383	0.0193
clefip-unige_RUN1	0.0075	0.5028	0.0934
clefip-unige_RUN2	0.0082	0.5646	0.0936
clefip-unige_RUN3	0.0075	0.5028	0.0934
clefip-unige_RUN4	0.0077	0.5123	0.0413
clefip-unige_RUN5	0.0045	0.351	0.0395
cwi_bm25	0.0072	0.5104	0.0208
cwi_boolean	0.0059	0.3108	0.0031
cwi_categorybm25	0.0058	0.381	0.0066
cwi_category	0.0062	0.4744	0.0197
hcuge_BiTeM	0.008	0.5204	0.0319
Hildesheim_MethodAnew	0.	0.	0.
humb_1	0.0079	0.4025	0.1631
NLEL_MethodA	0.0058	0.37	0.0574
TUD_800noTitle	0.0088	0.5699	0.0466
UAIC_MethodAnew	0.0002	0.0128	0.0026
UniNE_strat1	0.005	0.3655	0.0346
UniNE_strat2	0.0073	0.5533	0.0779
UniNE_strat3	0.0098	0.5681	0.075
UniNE_strat4	0.0089	0.585	0.0714
UniNE_strat5	0.0065	0.4544	0.0197
UniNE_strat6	0.0096	0.6411	0.062
run id	P	R	MAP

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Table 3: Measures for bundle S, task Main, continued

run id	P	R	MAP
UniNE_strat7	0.0097	0.6514	0.0199
UniNE_strat8	0.0082	0.5595	0.0189
uscom_BM25a	0.0084	0.5402	0.1165
uscom_BM25at	0.0088	0.586	0.1222
uscom_BM25b	0.0096	0.6012	0.0416
uscom_BM25bt	0.0099	0.6039	0.0503
uscom_BM25c	0.0094	0.5883	0.032
uscom_BM25ct	0.0096	0.5899	0.0372
uscom_BM25d	0.0092	0.5755	0.0315
uscom_BM25dt	0.0096	0.5899	0.0371
UTASICS_abs-des-ratf-GT	0.0093	0.6541	0.0758
UTASICS_abs-des-ratf	0.009	0.6118	0.0447
UTASICS_abs-tit-cla-ratf-GT-ipcr	0.0087	0.6746	0.0642
UTASICS_abs-tit-cla-ratf-ipcr	0.0087	0.641	0.0701
UTASICS_all-ratf-GT-ipcr	0.0093	0.675	0.0953
UTASICS_all-ratf-ipcr	0.0092	0.6621	0.0853
UTASICS_all-tf-idf-GT-ipcr	0.0082	0.6172	0.1102
UTASICS_all-tf-idf-ipcr	0.0087	0.6353	0.0981
run id	P	R	MAP

Table 4: Measures for bundle M, task Main

run id	P	R	MAP
clefip-dcu_baseline	0.0081	0.5975	0.055
clefip-dcu_Filtered2	0.0081	0.5997	0.0672
clefip-dcu_Filtered	0.0081	0.5924	0.0484
clefip-ug_bm25medstandard	0.0009	0.0257	0.0002
clefip-ug_infdocfreqBM25EnglishTerms	0.	0.	0.
clefip-ug_infdocfreqBM25FrenchTerms	0.	0.	0.
clefip-ug_infdocfreqBM25GermanTerms	0.	0.	0.
clefip-ug_infdocfreqCosEnglishTerms	0.0097	0.4932	0.0323
clefip-unige_RUN1	0.0079	0.5573	0.0998
clefip-unige_RUN2	0.0086	0.6109	0.0934
clefip-unige_RUN3	0.0079	0.5573	0.0998
clefip-unige_RUN4	0.0076	0.5533	0.0563
clefip-unige_RUN5	0.0058	0.4471	0.0462
cwi_bm25	0.0065	0.5298	0.0471
cwi_boolean	0.0186	0.3201	0.0036
cwi_categorybm25	0.0067	0.4659	0.0164
cwi_category	0.0058	0.5029	0.0164
hcuge_BiTeM	0.0086	0.5668	0.0348
humb_1	0.0099	0.4784	0.149
TUD_800noTitle	0.0095	0.626	0.0574
UniNE_strat8	0.0088	0.6108	0.0261
UTASICS_abs-des-ratf-GT	0.0101	0.6965	0.071
UTASICS_abs-des-ratf	0.01	0.6684	0.0677
UTASICS_abs-tit-cla-ratf-GT-ipcr	0.0093	0.7008	0.0539
UTASICS_abs-tit-cla-ratf-ipcr	0.0093	0.6756	0.0583
UTASICS_all-ratf-GT-ipcr	0.0106	0.7268	0.0851
UTASICS_all-ratf-ipcr	0.0105	0.7172	0.0717
UTASICS_all-tf-idf-GT-ipcr	0.0098	0.6835	0.0954
UTASICS_all-tf-idf-ipcr	0.0099	0.6897	0.0792
run id	P	R	MAP

Table 5: Measures for bundle XL, task Main

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
clefip-dcu_baseline	0.0112	0.6599	0.084
clefip-dcu_Filtered2	0.0118	0.625	0.0935
clefip-dcu_Filtered	0.0118	0.6201	0.0759
clefip-ug_infdocfreqCosEnglishTerms	0.0131	0.5452	0.0614
clefip-unige_RUN1	0.0102	0.5857	0.1156
clefip-unige_RUN2	0.0103	0.6013	0.1077
clefip-unige_RUN3	0.0102	0.5857	0.1157
clefip-unige_RUN4	0.0107	0.617	0.0837
clefip-unige_RUN5	0.0077	0.4688	0.0481
cwi_bm25	0.0098	0.6063	0.0736
cwi_boolean	0.0528	0.3659	0.0258
cwi_category	0.0131	0.5396	0.0407
hcuge_BiTeM	0.0267	0.5788	0.0748
humb_1	0.0316	0.5089	0.1664
TUD_800noTitle	0.0129	0.6486	0.0685
UniNE_strat8	0.0088	0.5376	0.0337
UTASICS_abs-des-ratf-GT	0.0124	0.7142	0.098
UTASICS_abs-des-ratf	0.0124	0.703	0.1034
UTASICS_abs-tit-cla-ratf-GT-ipcr	0.0124	0.7642	0.0956
UTASICS_abs-tit-cla-ratf-ipcr	0.0121	0.7292	0.0874
UTASICS_all-ratf-GT-ipcr	0.0136	0.783	0.1245
UTASICS_all-ratf-ipcr	0.0131	0.7616	0.099
UTASICS_all-tf-idf-GT-ipcr	0.0126	0.7378	0.122
UTASICS_all-tf-idf-ipcr	0.0124	0.733	0.105
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 6: Measures for bundle S, task Main

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
clefp-dcu_baseline	0.0092	0.1	0.1333	0.0483	0.5957	0.0269	0.0706	0.289	0.0615
clefp-dcu_Filtered2	0.0085	0.1333	0.1333	0.0417	0.579	0.057	0.1023	0.2697	0.0729
clefp-dcu_Filtered	0.0082	0.1	0.0383	0.0325	0.5594	0.0325	0.0623	0.2471	0.0501
clefp-run_ClaimsBOW	0.0217	0.	0.0333	0.0217	0.1971	0.	0.0313	0.1971	0.0174
clefp-ug_bm25medstandard	0.	0.	0.	0.	0.	0.	0.	0.	0.
clefp-ug_infdocfreqBM25EnglishTerms	0.	0.	0.	0.	0.	0.	0.	0.	0.
clefp-ug_infdocfreqBM25FrenchTermsNew	0.	0.	0.	0.	0.	0.	0.	0.	0.
clefp-ug_infdocfreqBM25GermanTerms	0.	0.	0.	0.	0.	0.	0.	0.	0.
clefp-ug_infdocfreqCosEnglishTerms	0.0075	0.0667	0.05	0.0217	0.383	0.0227	0.0269	0.1316	0.0193
clefp-unge_RUN1	0.0075	0.2	0.1167	0.0367	0.5028	0.0883	0.1011	0.2759	0.0934
clefp-unge_RUN2	0.0082	0.1667	0.1333	0.0367	0.5646	0.0698	0.1109	0.2872	0.0936
clefp-unge_RUN3	0.0075	0.2	0.1167	0.0367	0.5028	0.0883	0.1011	0.2759	0.0934
clefp-unge_RUN4	0.0077	0.1	0.0833	0.0317	0.5123	0.0269	0.0495	0.246	0.0413
clefp-unge_RUN5	0.0045	0.1	0.0667	0.0167	0.351	0.0499	0.0627	0.1625	0.0395
cwi_bm25	0.0072	0.0667	0.05	0.0183	0.5104	0.0083	0.0212	0.0944	0.0208
cwi_boolean	0.0059	0.	0.	0.0067	0.3108	0.	0.	0.0423	0.0031
cwi_categorybm25	0.0058	0.	0.0167	0.01	0.381	0.	0.0042	0.048	0.0066
cwi_category	0.0062	0.0333	0.05	0.025	0.4744	0.0042	0.0212	0.1569	0.0197
huge_BiTeM	0.008	0.0333	0.0667	0.0333	0.5204	0.0098	0.0423	0.2698	0.0319
Hildesheim_MethodAnew	0.	0.	0.	0.	0.	0.	0.	0.	0.
humb_1	0.0079	0.2333	0.15	0.0333	0.4025	0.1612	0.1891	0.3177	0.1631
NLEL_MethodA	0.0058	0.1	0.1333	0.0317	0.37	0.0298	0.0966	0.2114	0.0574
TUD_800noTitle	0.0088	0.1	0.0667	0.0417	0.5699	0.0212	0.0253	0.2755	0.0466
UAIC_MethodAnew	0.0002	0.0333	0.0167	0.0017	0.0128	0.0128	0.0128	0.0128	0.0026
UniNE_strat1	0.005	0.0667	0.0667	0.0183	0.3655	0.0283	0.051	0.1201	0.0346
UniNE_strat2	0.0073	0.1333	0.0833	0.035	0.5533	0.0684	0.0782	0.3001	0.0779
UniNE_strat3	0.0098	0.1	0.0833	0.0417	0.5681	0.0412	0.0638	0.3336	0.075
UniNE_strat4	0.0089	0.0667	0.0833	0.035	0.585	0.037	0.0668	0.3084	0.0714
UniNE_strat5	0.0065	0.	0.0333	0.0317	0.4544	0.	0.0283	0.248	0.0197
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

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Table 6: Measures for bundle S, task Main, continued

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
UniNE_strat6	0.0096	0.1333	0.0667	0.0333	0.6411	0.051	0.051	0.2353	0.062
UniNE_strat7	0.0097	0.	0.0333	0.0283	0.6514	0.	0.017	0.1738	0.0199
UniNE_strat8	0.0082	0.	0.05	0.0233	0.5595	0.	0.0465	0.1758	0.0189
uscom_BM25a	0.0084	0.1667	0.1333	0.0333	0.5402	0.0755	0.1254	0.3076	0.1165
uscom_BM25at	0.0088	0.1667	0.15	0.04	0.586	0.0755	0.1382	0.3386	0.1222
uscom_BM25b	0.0096	0.1	0.05	0.0333	0.6012	0.0268	0.0268	0.2902	0.0416
uscom_BM25bt	0.0099	0.1	0.0833	0.0333	0.6039	0.0298	0.0524	0.2932	0.0503
uscom_BM25c	0.0094	0.0667	0.0333	0.03	0.5883	0.014	0.014	0.2732	0.032
uscom_BM25ct	0.0096	0.0333	0.0667	0.0317	0.5899	0.0042	0.0396	0.2803	0.0372
uscom_BM25d	0.0092	0.0667	0.05	0.0283	0.5755	0.014	0.0325	0.2603	0.0315
uscom_BM25dt	0.0096	0.0667	0.0833	0.0317	0.5899	0.017	0.0581	0.2803	0.0371
UTASICS_abs-des-ratf-GT	0.0093	0.1	0.1	0.035	0.6541	0.0412	0.0823	0.3084	0.0758
UTASICS_abs-des-ratf	0.009	0.0333	0.0333	0.0333	0.6118	0.0185	0.0313	0.3042	0.0447
UTASICS_abs-tit-cla-ratf-GT-iper	0.0087	0.1333	0.1167	0.04	0.6746	0.0597	0.0922	0.2765	0.0642
UTASICS_abs-tit-cla-ratf-iper	0.0087	0.2	0.1333	0.0383	0.641	0.0736	0.116	0.2958	0.0701
UTASICS_all-ratf-GT-iper	0.0093	0.2333	0.15	0.0417	0.675	0.0922	0.1148	0.3798	0.0953
UTASICS_all-ratf-iper	0.0092	0.2333	0.1667	0.045	0.6621	0.0922	0.1189	0.3846	0.0853
UTASICS_all-tf-idf-GT-iper	0.0082	0.2333	0.1333	0.04	0.6172	0.1008	0.1106	0.2863	0.1102
UTASICS_all-tf-idf-iper	0.0087	0.2333	0.1333	0.0467	0.6353	0.1008	0.1106	0.3745	0.0981

Table 7: Measures for bundle M, task Main

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
clefip-dcu_baseline	0.0081	0.075	0.1	0.0437	0.5975	0.0201	0.053	0.3528	0.055
clefip-dcu_Filtered2	0.0081	0.1	0.1125	0.0388	0.5997	0.0427	0.0804	0.3383	0.0672
clefip-dcu_Filtered	0.0081	0.075	0.075	0.0362	0.5924	0.0244	0.0467	0.3213	0.0484
clefip-ug_bm25medstandard	0.0009	0.	0.	0.	0.0257	0.	0.	0.	0.0002
clefip-ug_infdocfreqBM25EnglishTerms	0.	0.	0.	0.	0.	0.	0.	0.	0.

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Table 7: Measures for bundle M, task Main, continued

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
clefp-ug_infdocfreqBM25FrenchTerms	0.	0.	0.	0.	0.	0.	0.	0.	0.
clefp-ug_infdocfreqBM25GermanTerms	0.	0.	0.	0.	0.	0.	0.	0.	0.
clefp-ug_infdocfreqCosEnglishTerms	0.0097	0.075	0.075	0.0312	0.4932	0.0207	0.0312	0.2188	0.0323
clefp-umige_RUN1	0.0079	0.2	0.1375	0.0437	0.5573	0.1116	0.1286	0.3687	0.0998
clefp-umige_RUN2	0.0086	0.15	0.1125	0.0375	0.6109	0.094	0.1249	0.3588	0.0934
clefp-umige_RUN3	0.0079	0.2	0.1375	0.0437	0.5573	0.1116	0.1286	0.3687	0.0998
clefp-umige_RUN4	0.0076	0.1	0.0875	0.0325	0.5533	0.0618	0.1205	0.3242	0.0563
clefp-umige_RUN5	0.0058	0.125	0.1	0.0263	0.4471	0.0447	0.0617	0.2003	0.0462
cwi_bm25	0.0065	0.1	0.075	0.0175	0.5298	0.0896	0.1029	0.1578	0.0471
cwi_boolean	0.0186	0.025	0.0125	0.0062	0.3201	0.0037	0.0037	0.0354	0.0036
cwi_categorybm25	0.0067	0.025	0.0375	0.0175	0.4659	0.0037	0.0485	0.1414	0.0164
cwi_category	0.0058	0.025	0.0375	0.0213	0.5029	0.0031	0.0159	0.163	0.0164
hcuqe_BiTeM	0.0086	0.025	0.05	0.0362	0.5668	0.0074	0.0317	0.3494	0.0348
humb_1	0.0099	0.225	0.1625	0.0425	0.4784	0.1282	0.1566	0.3658	0.149
TUD_800noTitle	0.0095	0.125	0.1	0.0488	0.626	0.0232	0.0337	0.372	0.0574
UniNE_strat8	0.0088	0.025	0.05	0.0312	0.6108	0.0037	0.0385	0.2862	0.0261
UTASICS_abs-des-ratf-GT	0.0101	0.1	0.125	0.0425	0.6965	0.0346	0.0765	0.3171	0.071
UTASICS_abs-des-ratf	0.01	0.1	0.0875	0.0463	0.6684	0.0249	0.0419	0.4046	0.0677
UTASICS_abs-tit-cla-ratf-GT-ipc	0.0093	0.125	0.1	0.0363	0.7008	0.0484	0.0728	0.2257	0.0539
UTASICS_abs-tit-cla-ratf-ipc	0.0093	0.175	0.1125	0.035	0.6756	0.0589	0.0906	0.2402	0.0583
UTASICS_all-ratf-ipc	0.0106	0.2	0.1375	0.0463	0.7268	0.0728	0.0934	0.367	0.0851
UTASICS_all-ratf-GT-ipc	0.0105	0.175	0.1375	0.04	0.7172	0.0691	0.0929	0.3449	0.0717
UTASICS_all-tf-idf-GT-ipc	0.0098	0.2	0.1125	0.0475	0.6835	0.0793	0.0866	0.2662	0.0954
UTASICS_all-tf-idf-ipc	0.0099	0.175	0.1	0.045	0.6897	0.0756	0.083	0.3103	0.0792
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 8: Measures for bundle XL, task Main

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
clefp-dcu_baseline	0.0112	0.0833	0.1417	0.0675	0.6599	0.0218	0.0664	0.4171	0.084
clefp-dcu_Filtered2	0.0118	0.1167	0.1583	0.0583	0.625	0.0398	0.0876	0.3797	0.0935
clefp-dcu_Filtered	0.0118	0.1	0.125	0.0567	0.6201	0.0276	0.0622	0.3684	0.0759
clefp-ug_infdlocfreqCosEnglishTerms	0.0131	0.1333	0.1167	0.0483	0.5452	0.0301	0.0535	0.2673	0.0614
clefp-umige_RUN1	0.0102	0.2667	0.175	0.055	0.5857	0.1099	0.1277	0.3619	0.1156
clefp-umige_RUN2	0.0103	0.2167	0.15	0.0475	0.6013	0.095	0.122	0.3381	0.1077
clefp-umige_RUN3	0.0102	0.2667	0.175	0.0558	0.5857	0.1099	0.1277	0.3652	0.1157
clefp-umige_RUN4	0.0107	0.1167	0.1667	0.0533	0.617	0.0527	0.131	0.3557	0.0837
clefp-umige_RUN5	0.0077	0.1167	0.1083	0.0342	0.4688	0.0372	0.0601	0.2076	0.0481
cwi_bm25	0.0098	0.1167	0.0833	0.0475	0.6063	0.0764	0.0884	0.2642	0.0736
cwi_boolean	0.0528	0.0333	0.0417	0.0317	0.3659	0.0066	0.0182	0.1451	0.0258
cwi_category	0.0131	0.0833	0.075	0.0392	0.5396	0.0164	0.0332	0.2223	0.0407
hcuqe_BiTeM	0.0267	0.1333	0.125	0.055	0.5788	0.0349	0.0656	0.3712	0.0748
humb_1	0.0316	0.2833	0.2333	0.0617	0.5089	0.1249	0.1726	0.4129	0.1664
TUD_800noTitle	0.0129	0.15	0.1167	0.0642	0.6486	0.0288	0.0429	0.3951	0.0685
UniNE_strat8	0.0088	0.0833	0.075	0.0325	0.5376	0.0182	0.0446	0.2393	0.0337
UTASICS_abs-des-ratf-GT	0.0124	0.1333	0.15	0.0667	0.7142	0.0376	0.0776	0.3852	0.098
UTASICS_abs-des-ratf	0.0124	0.1833	0.125	0.0708	0.703	0.047	0.0613	0.4508	0.1034
UTASICS_abs-tit-cla-ratf-GT-ipcr	0.0124	0.2	0.1667	0.0592	0.7642	0.0599	0.0938	0.32	0.0956
UTASICS_abs-tit-cla-ratf-ipcr	0.0121	0.1833	0.1417	0.0567	0.7292	0.0577	0.0936	0.3179	0.0874
UTASICS_all-ratf-GT-ipcr	0.0136	0.2667	0.1917	0.0717	0.783	0.0752	0.1074	0.4331	0.1245
UTASICS_all-ratf-ipcr	0.0131	0.1667	0.175	0.06	0.7616	0.0615	0.1073	0.379	0.099
UTASICS_all-tf-idf-GT-ipcr	0.0126	0.2333	0.1583	0.0708	0.7378	0.0735	0.0906	0.36	0.122
UTASICS_all-tf-idf-ipcr	0.0124	0.2	0.1417	0.0658	0.733	0.073	0.0914	0.3716	0.105
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

## 4.2 Language Tasks

Table 9: Measures for bundle S, task DE

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
hcuge_BiTeM	0.0073	0.4622	0.0242
humb_1	0.0073	0.3859	0.0373
TUD_800noTitle	0.0085	0.5991	0.0516
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 10: Measures for bundle M, task DE

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
hcuge_BiTeM	0.0073	0.4937	0.0231
humb_1	0.0094	0.4659	0.0597
TUD_800noTitle	0.009	0.6405	0.0596
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 11: Measures for bundle XL, task DE

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
humb_1	0.0315	0.5095	0.0782
TUD_800noTitle	0.0134	0.6489	0.0753
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 12: Measures for bundle S, task DE

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
hcege_BiTeM	0.0073	0.0333	0.0667	0.0267	0.4622	0.0098	0.0654	0.2048	0.0242
humb_1	0.0073	0.0667	0.0833	0.0133	0.3859	0.0313	0.1153	0.2046	0.0373
TUD_800noTitle	0.0085	0.1	0.1167	0.0383	0.5991	0.0212	0.0435	0.2671	0.0516
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 13: Measures for bundle M, task DE

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
hcege_BiTeM	0.0073	0.025	0.05	0.0237	0.4937	0.0074	0.0491	0.2786	0.0231
humb_1	0.0094	0.125	0.125	0.0275	0.4659	0.0345	0.1049	0.2809	0.0597
TUD_800noTitle	0.009	0.15	0.1375	0.045	0.6405	0.0269	0.0473	0.3241	0.0596
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 14: Measures for bundle XL, task DE

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
humb_1	0.0315	0.1667	0.1333	0.0408	0.5095	0.0521	0.1083	0.3103	0.0782
TUD_800noTitle	0.0134	0.1667	0.1583	0.0617	0.6489	0.0313	0.0645	0.3634	0.0753
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 15: Measures for bundle S, task EN

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
clefip-run_ClaimsBOW	0.0217	0.1971	0.0174
hcuge_BiTeM	0.0069	0.4396	0.0272
humb_1	0.0079	0.4025	0.1414
TUD_800noTitle	0.0087	0.5427	0.0407
UAIC_MethodAnew	0.0002	0.0128	0.0026
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 16: Measures for bundle M, task EN

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
hcuge_BiTeM	0.0078	0.5062	0.0292
humb_1	0.0099	0.4784	0.1137
TUD_800noTitle	0.009	0.5945	0.0429
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 17: Measures for bundle XL, task EN

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
humb_1	0.0319	0.5208	0.1319
TUD_800noTitle	0.0127	0.6244	0.0595
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 18: Measures for bundle S, task EN

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
clefp-run_ClaimsBOW	0.0217	0.	0.0333	0.0217	0.1971	0.	0.0313	0.1971	0.0174
huge_BiTeM	0.0069	0.	0.0167	0.0283	0.4396	0.	0.0042	0.2465	0.0272
humb_1	0.0079	0.2	0.1167	0.0283	0.4025	0.1426	0.1468	0.2713	0.1414
TUD_800noTitle	0.0087	0.0667	0.0833	0.035	0.5427	0.017	0.0866	0.2192	0.0407
UAIC_MethodAnew	0.0002	0.0333	0.0167	0.0017	0.0128	0.0128	0.0128	0.0128	0.0026
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 19: Measures for bundle M, task EN

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
huge_BiTeM	0.0078	0.	0.0125	0.0338	0.5062	0.	0.0031	0.3356	0.0292
humb_1	0.0099	0.15	0.0875	0.0312	0.4784	0.107	0.1101	0.3468	0.1137
TUD_800noTitle	0.009	0.075	0.075	0.0388	0.5945	0.0164	0.0686	0.3151	0.0429
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 20: Measures for bundle XL, task EN

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
humb_1	0.0319	0.2167	0.1417	0.055	0.5208	0.1015	0.113	0.4034	0.1319
TUD_800noTitle	0.0127	0.1	0.1083	0.0592	0.6244	0.0273	0.0755	0.3568	0.0595
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 21: Measures for bundle S, task FR

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
hcuge_BiTeM	0.0056	0.4018	0.0425
humb_1	0.0064	0.365	0.067
TUD_800noTitle	0.0083	0.5488	0.0296
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 22: Measures for bundle M, task FR

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
hcuge_BiTeM	0.0072	0.4704	0.038
humb_1	0.0087	0.4503	0.0551
TUD_800noTitle	0.0082	0.5844	0.0264
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>

Table 23: Measures for bundle XL, task FR

<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>
humb_1	0.0311	0.499	0.0786
TUD_800noTitle	0.0134	0.6209	0.0458
<b>run id</b>	<b>P</b>	<b>R</b>	<b>MAP</b>



Table 24: Measures for bundle S, task FR

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
hcege_BiTeM	0.0056	0.0333	0.0333	0.025	0.4018	0.0417	0.0458	0.2778	0.0425
humb_1	0.0064	0.1333	0.0833	0.0133	0.365	0.0737	0.1153	0.2046	0.067
TUD_800noTitle	0.0083	0.0667	0.0667	0.0333	0.5488	0.0227	0.0593	0.2181	0.0296
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 25: Measures for bundle M, task FR

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
hcege_BiTeM	0.0072	0.025	0.025	0.0287	0.4704	0.0312	0.0344	0.3517	0.038
humb_1	0.0087	0.1	0.0625	0.0188	0.4503	0.0553	0.0865	0.2172	0.0551
TUD_800noTitle	0.0082	0.05	0.05	0.0325	0.5844	0.017	0.0445	0.2616	0.0264
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

Table 26: Measures for bundle XL, task FR

run id	P	P5	P10	P100	R	R5	R10	R100	MAP
humb_1	0.0311	0.15	0.125	0.0325	0.499	0.0657	0.1142	0.2589	0.0786
TUD_800noTitle	0.0134	0.0833	0.075	0.0483	0.6209	0.0215	0.046	0.302	0.0458
run id	P	P5	P10	P100	R	R5	R10	R100	MAP

## References

- [1] Florina Piroi, Giovanna Roda, and Veronika Zenz. CLEF-IP 2009 Evaluation Summary. July 2009.

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