

Information Retrieval - Assignment II - Retrieval System

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1 Models

For this project we implemented the two following models :

- Term-based : TF-IDF
- Language Model : Maximum Likelihood + Smoothing

2 Metrics

We obtained the following metrics for the training queries :

	TF-IDF	MLE + Smoothing
Average Precision	0.09725	0.15300
Average Recall	0.04901	0.06403
Average F1	0.05818	0.07776
MAP	0.03466	0.06769

3 Remarks

- We bounded the AP denominator as $\text{MIN}((\text{TP}+\text{FN}), 100)$.
- We did not use stemming as it did not improve the score
- Computation takes between 21 and 25 minutes
- We unzipped all the subzips, namely zips-1.zip to zips-7.zip in a folder called zips
- The main method is located in the file "RetrievalSystem.scala" (the qrels/topics/zips paths might need to be adapted)