


Rethink the task

- Given: (query, document) pairs represented by a set of relevance estimators, a.k.a., features

DocID	BM25	LM	PageRank	Label
0001	1.6	1.1	0.9	0
0002	2.7	1.9	0.2	1

- Needed: a way of combining the estimators
 - $f(q, \{d\}_{i=1}^D) \rightarrow \text{ordered } \{d\}_{i=1}^D$
- Criterion: optimize IR metrics  **Key!**
 - P@k, MAP, NDCG, etc.