

Information Retrieval

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Assignment 5

University of California Irvine

February 27, 2011

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Scoring and the Vector Space Model

- I) The index contains 18,353 terms and has a size of 2.71 Megabyte.
- II) At the end of this document, we include a subset of the index that contains only the query terms. The term “in” is missing, though, since it is recognized as a stop word and, thus, removed during index construction and query evaluation. Notably, many of the terms have a tfidf-value of *zero*. This is because they occur in *every* document of the corpus, which causes the idf-value and, thereby, the product to be zero.
- III)
- IV)

V) The following table shows the pair-wise comparison of the books. The Cosine Similarity is symmetric.

	Emma	Jane Eyre	Moby Dick	Portrait of a Lady 1	Portrait of a Lady 2	Pride and Prejudice	Three Men in a Boat
Anna Karenina	0.00284	0.00408	0.00339	0.00444	0.00528	0.00296	0.00169
Emma	-	0.00398	0.00131	0.00171	0.00163	0.00667	0.00219
Jane Eyre	-	-	0.00356	0.00391	0.00412	0.00262	0.00257
Moby Dick	-	-	-	0.00245	0.00294	0.00196	0.00374
Portrait of a Lady 1	-	-	-	-	0.05252	0.00292	0.00142
Portrait of a Lady 2	-	-	-	-	-	0.00325	0.00131
Three Men in a Boat	-	-	-	-	-	-	0.00106

VI)

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Appendix

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