

## Abstract

A Good Information Retrieval System should have reasonably high relevancy. To get a high relevancy value, the system had to applying a good and tested ranking method. Thus, the question is, how to determine ranking methods performance. Ranking methods performance determined by it's relevancy which is measured with precision and recall parameters. Latent Semantic Indexing in this final assignment will be combined with relevance feedback, if we want to measure it's performance we have to build the software to test it's parameters.

In order to testing a method we need another method as comparison to measure Latent Semantic Indexing combined with relevance feedback,thus, Vector space model has been chosen as comparison.

The testing results of this final assignment show that Latent Semantic Indexing has better precision and recall than the Vector Space Model. Relevance Feedback which is applied to vector space model has been proved increasing it's relevancy, despite anomaly happen in LSI where it's relevancy decreased.

**Keywords:** *Information Retrieval, LSI, SVD, relevance feedback, VSM.*