

# University of Cape Town

# Information Retrieval CSC4000W

# Assignment 1b Report

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## 1 System Design

#### Included:

- -stemming (porter)
- -uses tf-idf

#### Own:

- -stopword exclusion (can still add more stop words if needed. can do when testing system as a whole.)
- -title similarity (modify ranking formula once full system developed.)
- The saurus  $\Rightarrow$  Natural language toolkit (nltk) with WordNet package to get synonyms for search terms. Synonyms stemmed using porter if stemming parameter is set true.

### 2 Performance Results

- 2.1 Mean Average Precision (MAP)
- 2.2 Normalized Discounted Cumulative Gain (NDCG)