INFSCI 2140 Project Proposal

Clinical Psychology Decision Support Track

Jing Pang jip45@pitt.edu Chuqian Ma chm179@pitt.edu Tian Xue tix20@pitt.edu

Search Problem

With the rapid development of society, people are paying much more attention to their mental health issues. Although a visit to psychologists can provide a more professional answer, it is also a convenient and efficient way to search documents online by ourselves. Our system retrieves psychology articles from the section of "Psychology and Psychologists" of the New York Times that relevant to latest psychology researches for users to search. Our goal is to make the search comprehensive, accurate and fast.

Major Inputs & Outputs

Inputs:

Psychology articles from the section of "Psychology and Psychologists" of the New York Times Outputs:

An online web application which provides a user interface to search for keywords in the related articles of New York Times in addition to existing searching capabilities.

Major Steps

- 1. Crawl documents from web
- 2. Preprocess documents (tokenize, normalize, remove stop words, etc.)
- 3. Construct inverted index
- 4. Retrieval and Ranking (user query -> processed query -> input to index)
- 5. Get result documents
- 6. Improvements (relevance feedback model)

Current States and Schedule

- 1. Retrieve the articles from the website through API of the New York Times (In progressing, done in week 10);
- 2. Build index for the articles (In progressing, done in week 12);
- 3. Completing a interface of the search bar to retrieve the related information from the query (done in week 13);
- 4. Addition: relevant feedback model (done in week 14).