Title: Automated Drug-SideEffect Identifier

Abstract:

It is a brief summary of approximately 300 words. It should include the research question, the rationale for the study, the hypothesis (if any), the method and the main findings. Descriptions of the method may include the design, procedures, the sample and any instruments that will be used.

Social Question Answering (SQA) is a growing area in QA research, especially in the Health Fields. Normally, in order to analyze QA data, health researchers compile a large amount of drug-side effect related questions and find the frequency of drugs and side effects found. However, the main approach used for this kind of research is through the programming concept known as text mining, which is used to collect and filter data. The utilization of text mining in Social QA analysis is seen now more than ever. In our research, we decide to build our own text mining algorithm written in the language R, that uses a drug and side effects library to find and collect key data and see whether this newfound method produces equal and perhaps better results than counting manually.

Introduction:

Social Question Answering (SQA) is an important and growing research area that is used in text mining and information retrieval. The main purpose of QA is to collect answers to human-generated questions automatically. SQA plays a significant role in society by allowing users of a SQA service to ask and answer questions, which in turn provide utilizable and unstructured datasets for analysis; its reach spans across several fields including health, social media, computer science, gaming, etc. Our goal is to build a new text mining algorithm that would take advantage of written drug and side effect libraries to find all the key drug and side effects data requested in an effective and efficient manner, of course more effective than doing the data counting manually as other pharmacy students have done in the past. Our method could be compared to the key concept identification used by Dr Zhe in his study on STD-related content back in 2016.