

Analysis of drug side effects using NLP

Questions/need - Gathering the most common drug side effects of depression drugs from patient review and prioritizing them for drug improvement.

In this project I will use patient's ratings to predict the sentiment of the reviews , and take the reviews with negative sentiments to do topic modeling to find collections of unfavorable conditions (side-effects) the drugs have on patients.

Data : Drug review database from UCI Machine learning repository

- 9069 reviews and ratings (10 star)

- Attributes (name of drug, condition, review ,rating , date : date of review entry, usefulCount : number of users who found review useful)

Algorithm : - Predict the sentiments of the reviews using the ratings

- Text preprocessing
- Dimensionality reduction
- Topic modeling

Tools :-python Libraries

- Tableau