Report

Recommendation system is one of the best tools that assist companies in increasing their revenues. For instance, 35% of amazon sales is from the recommendation system that the company implement. I am usually interested in reading reviews of restaurant because I don’t like to waste my time and money on food that is not well prepared. In fact, I am not a person that would like to taste and then decide. Therefore, I chose the idea of my project to be a restaurant recommendation system.

For this project I have use Yelp dataset which is available on their website. I explored the data by looking into it and summarizing it. Then move into the cleaning process. After that I will convert the raw text of the reviews into a quantifiable, meaningful format which is the heart of NLP. Then I will perform dimensionality reduction. Then I will use my model to create user profiles that form the basis for a recommendation system.

In this project I have used NMF and SVD to reach my model. The process was straight forward. The process included creating a meaningful format of the data which is the heart of the NLP. Then I tokenize the document and moved to vectorizing and used TFIDF, which gives a reflect the wight of words in the document.