**Book Recommendation Based On Text Classification:**

This purpose of this project was the recommendation of a new book to a reader based on the content of previous book a reader read. The whole content of each book was converted into. Stop words were removed from the tokens and then the stemming process was implemented on the tokens. A tf-idf model (term frequency–inverse document frequency) was then implemented to define the importance of each word depending on how frequent it is in this text and how infrequent it is in all the other documents. As a result, a high tf-idf score for a word will indicate that this word is specific to this text. Furthermore Cosine similarity was then implemented to find the pairwise difference between each book from the other book. Lastly the result was visualized using a dendogram to show recommended books after reading a specific book. The data set used for this project was a list of all books written by Charles Dickens available at Project Gutenberg.