

Assignment 1 – Update the vocabulary of the patient sentiment classification demo

Task:

Augment the RNN patient sentiment classification notebook as follows:

- 1) Analyse for 2 new patient records where patient note contains words not in the vocabulary, how it is handled. Print the index of the tokens.
- 2) Modify the vocabulary to add these words and a few training records with these words and see if the accuracy of the prediction improves for these new records

Submit:

Link to completed notebook with the outputs in it

Assignment 2 – Word Sense: Embeddings

Task:

Discover how different families of embedding models treat the polysemous word **“bank.”**

You will analyse embeddings created by models Spacy (en_core_web_md), word2vec for **polysemous** words - *finance* sense, the *river-edge* sense, or both.

Take following 2 sentences :

"I sat on a river bank",

"I went to bank to deposit money"

Task:

- 1) print the embeddings for the word “bank” by using different embedding models such as word2vec, spacy
- 2) Retrieve the 20 nearest neighbors of the token "bank" using cosine similarity.

Submit:

Link to completed notebook with the outputs in it