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Class: Bio NLP Homework 7

## **Problems:**

- Due to this dataset being a multilabel classification, some modifications had to be made for simplicity. From the sentence label(1 to 25) I rearrange to be only between 1 and 5, and transform this problem into a multi-class classification, from labels 1 to 5.
- In order to use MetaMap, we must register with UMLS. However, the registration seems like it will take over 4+ days. I have requested for the registration this past Monday, Oct 5th, but haven't got the acceptance/rejection yet.
- Therefore, I solve the problem in a different way, but with the same goal. I then choose the features as follow:
  - Count of Words
  - Bag of Words
  - o TF-IDF
- Features selection:
  - I use different combinations of my word space in order to create some feature selection,
    as:
    - Count of Words + Bag of Words
    - Bag of Words + TF-IDF
    - Count of Words + TF-IDF
    - Count of Words + Bag of Words + TF-IDF

## F1 Micro and F1 Macro is reported using Random Forest algorithm

