# DeepLearning\_Lesson3: Word Embedding

#### Lesson Overview:

In this lesson, we are going to discuss types of ANNs and Recurrent Neural Network.

## **Use Case Description:**

1. Sentiment Analysis on the imdb dataset

#### **Source Code:**

https://umkc.box.com/s/3so2s3dx7cjp4hwnurjx6t3it161ptey

### In class programming:

- 1. In the code provided, there are three mistake which stop the code to get run successfully; find those mistakes and explain why they need to be corrected to be able to get the code run
- 2. Add embedding layer to the model, did you experience any improvement?
- 3. Apply the code on 20\_newsgroup data set we worked in the previous classes from sklearn.datasets import fetch\_20newsgroups newsgroups\_train = fetch\_20newsgroups(subset='train', shuffle=True, categories=categories,)

### \*\*Bonus question

- 1. Plot the loss and accuracy using history object
- 2. Predict over one sample of data and check what will be the prediction for that

#### **Evaluation Criteria:**

- 1. Completeness of Features
- 2. Code Quality (<a href="https://en.wikipedia.org/wiki/Best coding practices">https://en.wikipedia.org/wiki/Best coding practices</a>)
- 3. Time
- 4. Feedback Submission

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