

# Fall 2021: CSEE5590/490 – Special Topics

## Python and Deep Learning Module-2 - ICP-11

### Lesson Overview:

In this lesson, we are going to discuss Word Embedding.

### Use Case Description:

1. Sentiment Analysis on the IMDB dataset

### Source Code:

Provided in your assignment folder and assignment repo. Dataset uploaded to Box [\[Link\]](#)

### In class programming:

1. In the code provided there are three mistake which stops the code from running successfully.
  - a. 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,)
```
4. Predict over one sample of data and check what will be the prediction for that.

\*\* Follow the IPC rubric guidelines.

### Submission Guidelines:

1. Once finished present your work to TA during class time.
2. Once evaluated submit your source code and documentation to GitHub and represent the work in a ReadMe file properly (short summary for the ICP).

### After class submission:

1. Complete your work and submit to your repo before the deadline.
2. Record a short video (1~3) minute, explaining the technical part and method used.
3. Add video link to ReadMe file.

**Note:** Cheating, plagiarism, disruptive behavior and other forms of unacceptable conduct are subject to strong sanctions in accordance with university policy. See detailed description of university policy at the following URL: <https://catalog.umkc.edu/special-notice/academic-honesty/>