## CS 505 – Spring 2021 – Assignment 5 (100 pts) – Transformers for Language Modeling and Classification Problems due 11:59PM EST, April 11.

In this assignment, you will learn all about implementing **Transformers** using **HuggingFace library** for **text classification** and **language modeling**, and use python framework for deep learning such as **Pytorch**. The assignment will ask you to follow tutorials written in Google Colab while answering some questions and modifying the tutorials.

Submit in Blackboard by 11:59PM EST, April 11.

- -Please indicate names of those you collaborate with.
- -Every late day will reduce your score by 20
- -After 2 days (i.e., if you submit on the 3rd day after due date), it will be marked 0.

## Submit your codes and answers in notebook form

## **Problem 1.** Transformers for Text Generation (60 pts)

- 1. (60 pts) Generate text from pretrained models and fine-tune models using Datasets library. Make a copy of this tutorial in Google Colab in your own Drive: click File → Save a copy in Drive and answer questions and write code as directed in the tutorial
- 2. (10 pts) Fine-tune models for text generation using raw text. Make a copy of this tutorial in Google Colab in your own Drive and answer questions and write code as directed in the tutorial

## **Problem 2.** Transformers for Text Classification (30 pts)

1. (30 pts) Fine-tune models for text classification. Make a copy of this tutorial in Google Colab in your own Drive and answer questions and write code as directed in the tutorial