Assignment 5, Applied ML

John MacLaren Walsh

Fall, AY 2023-2024

1 Your Challenge

Your task is to build and train a model that predicts whether or not a review for a movie indicates the movie was liked, or was not liked.

2 Training Dataset

Train your model using exclusively the training portion of the IMDB dataset in tensorflow datasets - neither your validation set nor your training set should take from the portion of tensorflow datasets allocated to testing. You may, but are not required to, use a transfer learning approach loading a model from HuggingFace or tensorflow hub.

3 What you must submit

You will upload to bblearn a file assignment5.zip or assignment5.tgz containing the following files

- 1. buildAndTrainIMDBModel.py: This must contain all of the code necessary to train your model and then save it.
- 2. savedModel.zip or savedModel.h5 Your saved model either a zip/tgz of the savedModel directory or a .h5 created by the model.save('savedModel') or model.save('savedModel.h5') command.
- 3. runModel.py: This must contain all of the code to load your saved model, loads the testing part of the IMDB reviews dataset and evaluates the score and accuracy of your model on it, then prints these.

4 How you will be graded

If all your code works and it appears that your training code generated your model, the rest of your grade will be determined by a relative rank of the loss obtained by your model on a selected testing set.