

WORKSHOP 4 ASSIGNMENT

(PRACTICAL DEEP LEARNING)

DUE DATE: JULY 30, 2021

There are two options to choose from:

- Questions: Answer 5 questions in your own words (do not copy/paste from the workshop materials), where each question carries 1 mark.
- Project: Train a simple classification model (NLP/Vision) and share the code

Please choose **only one option**.

1. OPTION 1: QUESTIONS (MAXIMUM 80 WORDS TO ANSWER EACH)

- A. Why we consider Language models as self-supervised?
- B. What are the essential components for training a model?
- C. How to deal with a model that can not predict certain labels (confused)?
- D. How to save and load a trained model and get predictions using FastAi?
- E. What does the FastAi's `fine_tune()` function do?

2. OPTION 2: PROJECT

Write an application to train a simple classification model (either for NLP or Vision) using a library of your own choosing (FastAi, PyTorch, Keras, or Tensorflow, ...) and share the code with its accuracy. You can share the code by sending a .py file or a public Colab link. There is not any requirement for accuracy score.

The code should consist of:

- A. Preprocessing/Loading the dataset
- B. Defining the Model
- C. Training
- D. Save/Deploy the model
- E. Getting predictions on unseen data

(i) Do not share the code in Microsoft Words/PDF formats. *(ii)* Make sure the Colab notebook is accessible for "Everyone with the link". **There are penalties for these errors!**