ReadMe

DLFA - Cohort 4 Module 3 – Deep Learning for Computer Vision

Kaggle Competition - 18th January 2024

Computer Vision - Face mask classification challenge using CNNs

This Kaggle competition on Computer Vision (https://www.kaggle.com/t/cabf3c47d31844449b5b7079de3441d5) is a team activity. This activity carries 10 marks towards the DLFA program. It is mainly to test your understanding of the topics that have been covered so far in the Deep Learning program and specifically on Computer Vision. This competition will start on Thursday, January 18 and ends on Saturday, February 10, 2024 11:59 PM. We have helped you in forming teams during the entire duration of the competition. Each team can have a maximum of four to five members. The details of all the teams have been uploaded on the LMS. You are welcome to rename your team while making the submission on Kaggle. So, you are encouraged to hold team meetings as per your convenience to discuss your progress and submission. We also require that as a team, you do not share your code with any other team. The submission has to be made on Kaggle only. However, we will be evaluating your code as well. Please join the competition and accept the rules by clicking the link given above. After that, you can form a team and make submission using the format given on Kaggle. We will provide support on Sunday, January 21 with the mentors for a live session in place of the usual assignment session, in case you have any queries or are facing any issues. The mentors will be there to help you in resolving any issues you face, but will NOT help you in coding.

Please download the train data from the given google Colab Notebook. We are providing a Colab Notebook to help you download the train data. The train data, is in

.jpg format and zipped together are NOT provided on Kaggle, but can be downloaded using the colab notebook which we have provided. The test data (.jpg format and zipped) and the sample submission file (in csv format) have been provided on Kaggle.

The Problem Statement, Objective, Background, Dataset, and Steps for implementation are provided within the Instruction Notebook (Colab).

As this competition aims to differentiate between images of people, with masks, without masks and incorrectly placed masks, you need to implement either Convolutional Neural Networks or pre-trained models such as VGG16, ResNet 50 or GoogleNet for completing this activity. You are free to develop your own code for your DL model in Python to differentiate the images provided in .jpg format.

During the entire duration of the competition (Thursday, January 18 - Saturday, February 10), the mentor(s) can be approached for guidance on Sunday, January 21 when there is difficulty in implementing specific steps. However, it is the team's responsibility to work towards the solution in the given time. Your team's solution notebook should be presented to us, latest, by 11:59 PM on 10th February. Please make the submission on Kaggle exactly in the format given in the 'sample_submission.csv' file. Any deviation from the specified format will result in an invalid submission. You can make up to 20 submissions (as an individual or as a team) in a day. After February 10, 2024 11:59 PM, you will not be able to make any submissions. Failure in making a single submission will result in the entire team getting zero marks.

Note: Submit the notebook to dlfa.support@talentsprint.com after the completion of kaggle competition to ensure the 'proof of code' for your final submission on kaggle before Saturday, February 10, 2024 11:59 PM.

- In colab notebook, goto *File* and *save and pin revision* to save the changes. ● Make sure to give the edit access and share only one file which resembles the final predictions that are submitted on kaggle.