## ClassiFicon 2021

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## Dataset

The dataset is downloaded and segmented into train and test sets further subdivided into 'No smile', 'positive', 'negative' classes folders.

- Train.csv and test.csv
  - The train.csv and test.csv contains the names of the images and their corresponding classes.
  - The three classes in each of train.csv and test.csv are as follows:
    - no smile, positive, negative
- Positive & negative smile classification To train the model VGG16 on the dataset:-
  - The positive and negative classes dataset are in one folder and the no smile data in another.
  - We apply augmentation on the first folder to further expand the dataset.
    (apply\_aug.py in the PosNeg/VGG16/ folder)
  - Further the dataset path is to be specified in line 195 of the 'train.py' code (in the PosNeg/VGG16/ folder)
- Smile and no smile classification: To train the Spatial transformer model on the dataset for classification of Smile and no smile:-
  - The no smile folder is not used for training or testing for this task. The smile and no smile data are kept in two different folders
  - We apply augmentation to each of the train dataset folders by specifying the path in line 27 of the 'apply\_aug.py' code in SmileClassification/Spatial\_transformers/ folder
  - The path in the train.py is to be specified in lines 167 and 188
    SmileClassification/Spatial transformers/ folder

We have executed the implementation as described in this file. If you have any queries, please contact us at:-

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