

```
from google.colab import drive
from google.colab import files
from PIL import Image
from tensorflow.keras import layers
from tensorflow.python.client import device_lib
from __future__ import print_function
import PIL
import matplotlib.pyplot as plt
import os
import cv2
import timeit
import numpy as np
import tensorflow as tf
from tensorflow.keras import Model, Input
from tensorflow.keras.layers import Conv2D, MaxPooling2D, Dense, ReLU, BatchNormalization
from tensorflow.keras.layers import Add, GlobalAveragePooling2D
from tensorflow.keras.layers import Dropout, Flatten
from tensorflow.keras.datasets import mnist
from tensorflow.keras.models import Sequential

def getGitRepo(name):
    !rm -rf '/content/'$name
    !git clone 'https://github.com/Abo-Ahmed/'$name'

#getGitRepo('p_witchbooru')
#getGitRepo('p_danbooru_pretrained')
getGitRepo('project-master')

execfile('/content/project-master/main.py')
```



```

Cloning into 'project-master'...
remote: Enumerating objects: 1573, done.
remote: Counting objects: 100% (246/246), done.
remote: Compressing objects: 100% (173/173), done.
remote: Total 1573 (delta 124), reused 182 (delta 66), pack-reused 1327
Receiving objects: 100% (1573/1573), 164.23 MiB | 32.52 MiB/s, done.
Resolving deltas: 100% (392/392), done.
>>> main module loaded ...
XXX deleted, model preTrained
>>> handler module loaded ...
>>> class model loaded ...
>>> configuration module loaded ...
>>> dataset module loaded ...
>>> model module loaded ...
>>> preTrained class loaded ...
>>> cnnFirst class loaded ...
>> all modules loaded ...
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
XXX GPU device not found
>>> Tensorflow version: 2.6.0 - Tensorflow Device Name:
>>> Keras version: 2.6.0
Drive already mounted at /content/drive; to attempt to forcibly remount, call drive.mount()
>>> List of all local devices:
['/device:CPU:0']
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
>>> tensor configuration ...
>>> cannot configure tensorflow
>> intial configurations done...
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
>>> reading TEST dataset ...
NSFW test: 100
['245114.jpg', '2504145.jpg', '1167060.jpg', '46035.jpg', '680100.jpg', '818056.jpg',
=====
SFW test: 200
['2921141.jpg', '1632141.jpg', '1204141.jpg', '724141.jpg', '546141.jpg', '1907141.jpg',
=====
>>> reading TRAIN dataset ...
NSFW train: 498
['311127.jpg', '36108.jpg', '314114.jpg', '1216126.jpg', '883150.jpg', '897057.jpg',
=====
SFW train: 798
['2286141.jpg', '2335141.jpg', '2145141.jpg', '462141.jpg', '1519141.jpg', '2039141.jpg',
=====
test dimensions: (300, 512, 512) , (300,)
=====
train dimensions: (1296, 512, 512) , (1296,)
=====
>>> preTrained model intiated ...
>>> loading preTrained model ...
WARNING:tensorflow:No training configuration found in the save file, so the model was
>>> showing preTrained summery ...
Model: "resnet custom v4"

```

batch_normalization (BatchNormaliza	(None, 256, 256, 64) 256	conv2d[0][0]
activation (Activation)	(None, 256, 256, 64) 0	batch_normalization[0][0]
max_pooling2d (MaxPooling2D)	(None, 128, 128, 64) 0	activation[0][0]
conv2d_1 (Conv2D)	(None, 128, 128, 64) 4096	max_pooling2d[0][0]
batch_normalization_1 (BatchNor	(None, 128, 128, 64) 256	conv2d_1[0][0]
activation_1 (Activation)	(None, 128, 128, 64) 0	batch_normalization_1[0][0]
conv2d_2 (Conv2D)	(None, 128, 128, 64) 36864	activation_1[0][0]
batch_normalization_2 (BatchNor	(None, 128, 128, 64) 256	conv2d_2[0][0]
activation_2 (Activation)	(None, 128, 128, 64) 0	batch_normalization_2[0][0]
conv2d_3 (Conv2D)	(None, 128, 128, 256) 16384	activation_2[0][0]
conv2d_4 (Conv2D)	(None, 128, 128, 256) 16384	max_pooling2d[0][0]
batch_normalization_3 (BatchNor	(None, 128, 128, 256) 1024	conv2d_3[0][0]
batch_normalization_4 (BatchNor	(None, 128, 128, 256) 1024	conv2d_4[0][0]
add (Add)	(None, 128, 128, 256) 0	batch_normalization_3[0][0] batch_normalization_4[0][0]
activation_3 (Activation)	(None, 128, 128, 256) 0	add[0][0]
conv2d_5 (Conv2D)	(None, 128, 128, 64) 16384	activation_3[0][0]
batch_normalization_5 (BatchNor	(None, 128, 128, 64) 256	conv2d_5[0][0]
activation_4 (Activation)	(None, 128, 128, 64) 0	batch_normalization_5[0][0]
conv2d_6 (Conv2D)	(None, 128, 128, 64) 36864	activation_4[0][0]
batch_normalization_6 (BatchNor	(None, 128, 128, 64) 256	conv2d_6[0][0]
activation_5 (Activation)	(None, 128, 128, 64) 0	batch_normalization_6[0][0]
conv2d_7 (Conv2D)	(None, 128, 128, 256) 16384	activation_5[0][0]
batch_normalization_7 (BatchNor	(None, 128, 128, 256) 1024	conv2d_7[0][0]
add_1 (Add)	(None, 128, 128, 256) 0	batch_normalization_7[0][0] activation_3[0][0]
activation_6 (Activation)	(None, 128, 128, 256) 0	add_1[0][0]
conv2d_8 (Conv2D)	(None, 128, 128, 64) 16384	activation_6[0][0]
batch_normalization_8 (BatchNor	(None, 128, 128, 64) 256	conv2d_8[0][0]
activation_7 (Activation)	(None, 128, 128, 64) 0	batch_normalization_8[0][0]
conv2d_9 (Conv2D)	(None, 128, 128, 64) 36864	activation_7[0][0]
batch_normalization_9 (BatchNor	(None, 128, 128, 64) 256	conv2d_9[0][0]