

```
train_model
C:\Users\amaindola\Anaconda3\envs\img-quality-assesment\python.exe "C:/Users/amaindola/Google Drive/Colab
Notebooks/img-quality-assesment/nima/model/train_model.py" -n mobilenet -s 3000 -b 128 -t technical -f True -e 20
-v 1
2021-08-08 03:01:33.903894: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cudart64_110.dll'; dlerror: cudart64_110.dll not found
2021-08-08 03:01:33.904167: I tensorflow/stream_executor/cuda/cudart_stub.cc:29] Ignore above cudart dlerror if
you do not have a GPU set up on your machine.
Images directory C:\Users\amaindola\Google Drive\Colab Notebooks\img-quality-assesment\data\tid2013\
distorted_images
    Number of samples picked 3000
    NIMA Base CNN module - tensorflow.keras.applications.mobilenet_v2.MobileNetV2
WARNING:tensorflow:`input_shape` is undefined or non-square, or `rows` is not in [96, 128, 160, 192, 224]. Weights
for input shape (224, 224) will be loaded as the default.
2021-08-08 03:01:43.388194: I tensorflow/stream_executor/platform/default/dso_loader.cc:53] Successfully opened
dynamic library nvcuda.dll
2021-08-08 03:01:43.707809: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1733] Found device 0 with
properties:
pciBusID: 0000:01:00.0 name: Quadro P2000 with Max-Q Design computeCapability: 6.1
coreClock: 1.468GHz coreCount: 6 deviceMemorySize: 4.00GiB deviceMemoryBandwidth: 89.53GiB/s
2021-08-08 03:01:43.710203: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cudart64_110.dll'; dlerror: cudart64_110.dll not found
2021-08-08 03:01:43.712224: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cublas64_11.dll'; dlerror: cublas64_11.dll not found
2021-08-08 03:01:43.714280: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cublasLt64_11.dll'; dlerror: cublasLt64_11.dll not found
2021-08-08 03:01:43.716567: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cufft64_10.dll'; dlerror: cufft64_10.dll not found
2021-08-08 03:01:43.718865: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'curand64_10.dll'; dlerror: curand64_10.dll not found
2021-08-08 03:01:43.721176: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cusolver64_11.dll'; dlerror: cusolver64_11.dll not found
2021-08-08 03:01:43.723493: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cusparse64_11.dll'; dlerror: cusparse64_11.dll not found
2021-08-08 03:01:43.725899: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cudnn64_8.dll'; dlerror: cudnn64_8.dll not found
2021-08-08 03:01:43.726208: W tensorflow/core/common_runtime/gpu/gpu_device.cc:1766] Cannot dlopen some GPU
libraries. Please make sure the missing libraries mentioned above are installed properly if you would like to use
GPU. Follow the guide at https://www.tensorflow.org/install/gpu for how to download and setup the required
libraries for your platform.
Skipping registering GPU devices...
2021-08-08 03:01:43.727433: I tensorflow/core/platform/cpu_feature_guard.cc:142] This TensorFlow binary is
optimized with oneAPI Deep Neural Network Library (oneDNN) to use the following CPU instructions in performance-
critical operations:  AVX AVX2
To enable them in other operations, rebuild TensorFlow with the appropriate compiler flags.
2021-08-08 03:01:43.730316: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1258] Device interconnect
StreamExecutor with strength 1 edge matrix:
2021-08-08 03:01:43.730581: I tensorflow/core/common_runtime/gpu/gpu_device.cc:1264]
    Freezing base CNN layers.
    Model compiled successfully.
Model: "model"
```

Layer (type)	Output Shape	Param #	Connected to
input_1 (InputLayer)	[(None, 256, 256, 3)]	0	
Conv1 (Conv2D)	(None, 128, 128, 32)	864	input_1[0][0]
bn_Conv1 (BatchNormalization)	(None, 128, 128, 32)	128	Conv1[0][0]
Conv1_relu (ReLU)	(None, 128, 128, 32)	0	bn_Conv1[0][0]
expanded_conv_depthwise (Depthwise Conv2D)	(None, 128, 128, 32)	288	Conv1_relu[0][0]
expanded_conv_depthwise_BN (Batch Normalization)	(None, 128, 128, 32)	128	expanded_conv_depthwise[0][0]
expanded_conv_depthwise_relu (ReLU)	(None, 128, 128, 32)	0	expanded_conv_depthwise_BN[0][0]
expanded_conv_project (Conv2D)	(None, 128, 128, 16)	512	expanded_conv_depthwise_relu[0][0]
expanded_conv_project_BN (Batch Normalization)	(None, 128, 128, 16)	64	expanded_conv_project[0][0]
block_1_expand (Conv2D)	(None, 128, 128, 96)	1536	expanded_conv_project_BN[0][0]

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block_1_expand_BN (BatchNormali	(None, 128, 128, 96)	384		block_1_expand[0][0]
block_1_expand_relu (ReLU)	(None, 128, 128, 96)	0		block_1_expand_BN[0][0]
block_1_pad (ZeroPadding2D)	(None, 129, 129, 96)	0		block_1_expand_relu[0][0]
block_1_depthwise (DepthwiseCon	(None, 64, 64, 96)	864		block_1_pad[0][0]
block_1_depthwise_BN (BatchNorm	(None, 64, 64, 96)	384		block_1_depthwise[0][0]
block_1_depthwise_relu (ReLU)	(None, 64, 64, 96)	0		block_1_depthwise_BN[0][0]
block_1_project (Conv2D)	(None, 64, 64, 24)	2304		block_1_depthwise_relu[0][0]
block_1_project_BN (BatchNormal	(None, 64, 64, 24)	96		block_1_project[0][0]
block_2_expand (Conv2D)	(None, 64, 64, 144)	3456		block_1_project_BN[0][0]
block_2_expand_BN (BatchNormali	(None, 64, 64, 144)	576		block_2_expand[0][0]
block_2_expand_relu (ReLU)	(None, 64, 64, 144)	0		block_2_expand_BN[0][0]
block_2_depthwise (DepthwiseCon	(None, 64, 64, 144)	1296		block_2_expand_relu[0][0]
block_2_depthwise_BN (BatchNorm	(None, 64, 64, 144)	576		block_2_depthwise[0][0]
block_2_depthwise_relu (ReLU)	(None, 64, 64, 144)	0		block_2_depthwise_BN[0][0]
block_2_project (Conv2D)	(None, 64, 64, 24)	3456		block_2_depthwise_relu[0][0]
block_2_project_BN (BatchNormal	(None, 64, 64, 24)	96		block_2_project[0][0]
block_2_add (Add)	(None, 64, 64, 24)	0		block_1_project_BN[0][0] block_2_project_BN[0][0]
block_3_expand (Conv2D)	(None, 64, 64, 144)	3456		block_2_add[0][0]
block_3_expand_BN (BatchNormali	(None, 64, 64, 144)	576		block_3_expand[0][0]
block_3_expand_relu (ReLU)	(None, 64, 64, 144)	0		block_3_expand_BN[0][0]
block_3_pad (ZeroPadding2D)	(None, 65, 65, 144)	0		block_3_expand_relu[0][0]
block_3_depthwise (DepthwiseCon	(None, 32, 32, 144)	1296		block_3_pad[0][0]
block_3_depthwise_BN (BatchNorm	(None, 32, 32, 144)	576		block_3_depthwise[0][0]
block_3_depthwise_relu (ReLU)	(None, 32, 32, 144)	0		block_3_depthwise_BN[0][0]
block_3_project (Conv2D)	(None, 32, 32, 32)	4608		block_3_depthwise_relu[0][0]
block_3_project_BN (BatchNormal	(None, 32, 32, 32)	128		block_3_project[0][0]
block_4_expand (Conv2D)	(None, 32, 32, 192)	6144		block_3_project_BN[0][0]
block_4_expand_BN (BatchNormali	(None, 32, 32, 192)	768		block_4_expand[0][0]
block_4_expand_relu (ReLU)	(None, 32, 32, 192)	0		block_4_expand_BN[0][0]
block_4_depthwise (DepthwiseCon	(None, 32, 32, 192)	1728		block_4_expand_relu[0][0]
block_4_depthwise_BN (BatchNorm	(None, 32, 32, 192)	768		block_4_depthwise[0][0]
block_4_depthwise_relu (ReLU)	(None, 32, 32, 192)	0		block_4_depthwise_BN[0][0]
block_4_project (Conv2D)	(None, 32, 32, 32)	6144		block_4_depthwise_relu[0][0]
block_4_project_BN (BatchNormal	(None, 32, 32, 32)	128		block_4_project[0][0]
block_4_add (Add)	(None, 32, 32, 32)	0		block_3_project_BN[0][0] block_4_project_BN[0][0]
block_5_expand (Conv2D)	(None, 32, 32, 192)	6144		block_4_add[0][0]

block_5_expand_BN (BatchNormali	(None, 32, 32, 192)	768	block_5_expand[0][0]
block_5_expand_relu (ReLU)	(None, 32, 32, 192)	0	block_5_expand_BN[0][0]
block_5_depthwise (DepthwiseCon	(None, 32, 32, 192)	1728	block_5_expand_relu[0][0]
block_5_depthwise_BN (BatchNorm	(None, 32, 32, 192)	768	block_5_depthwise[0][0]
block_5_depthwise_relu (ReLU)	(None, 32, 32, 192)	0	block_5_depthwise_BN[0][0]
block_5_project (Conv2D)	(None, 32, 32, 32)	6144	block_5_depthwise_relu[0][0]
block_5_project_BN (BatchNormal	(None, 32, 32, 32)	128	block_5_project[0][0]
block_5_add (Add)	(None, 32, 32, 32)	0	block_4_add[0][0] block_5_project_BN[0][0]
block_6_expand (Conv2D)	(None, 32, 32, 192)	6144	block_5_add[0][0]
block_6_expand_BN (BatchNormali	(None, 32, 32, 192)	768	block_6_expand[0][0]
block_6_expand_relu (ReLU)	(None, 32, 32, 192)	0	block_6_expand_BN[0][0]
block_6_pad (ZeroPadding2D)	(None, 33, 33, 192)	0	block_6_expand_relu[0][0]
block_6_depthwise (DepthwiseCon	(None, 16, 16, 192)	1728	block_6_pad[0][0]
block_6_depthwise_BN (BatchNorm	(None, 16, 16, 192)	768	block_6_depthwise[0][0]
block_6_depthwise_relu (ReLU)	(None, 16, 16, 192)	0	block_6_depthwise_BN[0][0]
block_6_project (Conv2D)	(None, 16, 16, 64)	12288	block_6_depthwise_relu[0][0]
block_6_project_BN (BatchNormal	(None, 16, 16, 64)	256	block_6_project[0][0]
block_7_expand (Conv2D)	(None, 16, 16, 384)	24576	block_6_project_BN[0][0]
block_7_expand_BN (BatchNormali	(None, 16, 16, 384)	1536	block_7_expand[0][0]
block_7_expand_relu (ReLU)	(None, 16, 16, 384)	0	block_7_expand_BN[0][0]
block_7_depthwise (DepthwiseCon	(None, 16, 16, 384)	3456	block_7_expand_relu[0][0]
block_7_depthwise_BN (BatchNorm	(None, 16, 16, 384)	1536	block_7_depthwise[0][0]
block_7_depthwise_relu (ReLU)	(None, 16, 16, 384)	0	block_7_depthwise_BN[0][0]
block_7_project (Conv2D)	(None, 16, 16, 64)	24576	block_7_depthwise_relu[0][0]
block_7_project_BN (BatchNormal	(None, 16, 16, 64)	256	block_7_project[0][0]
block_7_add (Add)	(None, 16, 16, 64)	0	block_6_project_BN[0][0] block_7_project_BN[0][0]
block_8_expand (Conv2D)	(None, 16, 16, 384)	24576	block_7_add[0][0]
block_8_expand_BN (BatchNormali	(None, 16, 16, 384)	1536	block_8_expand[0][0]
block_8_expand_relu (ReLU)	(None, 16, 16, 384)	0	block_8_expand_BN[0][0]
block_8_depthwise (DepthwiseCon	(None, 16, 16, 384)	3456	block_8_expand_relu[0][0]
block_8_depthwise_BN (BatchNorm	(None, 16, 16, 384)	1536	block_8_depthwise[0][0]
block_8_depthwise_relu (ReLU)	(None, 16, 16, 384)	0	block_8_depthwise_BN[0][0]
block_8_project (Conv2D)	(None, 16, 16, 64)	24576	block_8_depthwise_relu[0][0]
block_8_project_BN (BatchNormal	(None, 16, 16, 64)	256	block_8_project[0][0]
block_8_add (Add)	(None, 16, 16, 64)	0	block_7_add[0][0] block_8_project_BN[0][0]

block_9_expand (Conv2D)	(None, 16, 16, 384)	24576	block_8_add[0][0]
block_9_expand_BN (BatchNormali	(None, 16, 16, 384)	1536	block_9_expand[0][0]
block_9_expand_relu (ReLU)	(None, 16, 16, 384)	0	block_9_expand_BN[0][0]
block_9_depthwise (DepthwiseCon	(None, 16, 16, 384)	3456	block_9_expand_relu[0][0]
block_9_depthwise_BN (BatchNorm	(None, 16, 16, 384)	1536	block_9_depthwise[0][0]
block_9_depthwise_relu (ReLU)	(None, 16, 16, 384)	0	block_9_depthwise_BN[0][0]
block_9_project (Conv2D)	(None, 16, 16, 64)	24576	block_9_depthwise_relu[0][0]
block_9_project_BN (BatchNormal	(None, 16, 16, 64)	256	block_9_project[0][0]
block_9_add (Add)	(None, 16, 16, 64)	0	block_8_add[0][0] block_9_project_BN[0][0]
block_10_expand (Conv2D)	(None, 16, 16, 384)	24576	block_9_add[0][0]
block_10_expand_BN (BatchNormal	(None, 16, 16, 384)	1536	block_10_expand[0][0]
block_10_expand_relu (ReLU)	(None, 16, 16, 384)	0	block_10_expand_BN[0][0]
block_10_depthwise (DepthwiseCo	(None, 16, 16, 384)	3456	block_10_expand_relu[0][0]
block_10_depthwise_BN (BatchNor	(None, 16, 16, 384)	1536	block_10_depthwise[0][0]
block_10_depthwise_relu (ReLU)	(None, 16, 16, 384)	0	block_10_depthwise_BN[0][0]
block_10_project (Conv2D)	(None, 16, 16, 96)	36864	block_10_depthwise_relu[0][0]
block_10_project_BN (BatchNorma	(None, 16, 16, 96)	384	block_10_project[0][0]
block_11_expand (Conv2D)	(None, 16, 16, 576)	55296	block_10_project_BN[0][0]
block_11_expand_BN (BatchNormal	(None, 16, 16, 576)	2304	block_11_expand[0][0]
block_11_expand_relu (ReLU)	(None, 16, 16, 576)	0	block_11_expand_BN[0][0]
block_11_depthwise (DepthwiseCo	(None, 16, 16, 576)	5184	block_11_expand_relu[0][0]
block_11_depthwise_BN (BatchNor	(None, 16, 16, 576)	2304	block_11_depthwise[0][0]
block_11_depthwise_relu (ReLU)	(None, 16, 16, 576)	0	block_11_depthwise_BN[0][0]
block_11_project (Conv2D)	(None, 16, 16, 96)	55296	block_11_depthwise_relu[0][0]
block_11_project_BN (BatchNorma	(None, 16, 16, 96)	384	block_11_project[0][0]
block_11_add (Add)	(None, 16, 16, 96)	0	block_10_project_BN[0][0] block_11_project_BN[0][0]
block_12_expand (Conv2D)	(None, 16, 16, 576)	55296	block_11_add[0][0]
block_12_expand_BN (BatchNormal	(None, 16, 16, 576)	2304	block_12_expand[0][0]
block_12_expand_relu (ReLU)	(None, 16, 16, 576)	0	block_12_expand_BN[0][0]
block_12_depthwise (DepthwiseCo	(None, 16, 16, 576)	5184	block_12_expand_relu[0][0]
block_12_depthwise_BN (BatchNor	(None, 16, 16, 576)	2304	block_12_depthwise[0][0]
block_12_depthwise_relu (ReLU)	(None, 16, 16, 576)	0	block_12_depthwise_BN[0][0]
block_12_project (Conv2D)	(None, 16, 16, 96)	55296	block_12_depthwise_relu[0][0]
block_12_project_BN (BatchNorma	(None, 16, 16, 96)	384	block_12_project[0][0]
block_12_add (Add)	(None, 16, 16, 96)	0	block_11_add[0][0] block_12_project_BN[0][0]

block_13_expand (Conv2D)	(None, 16, 16, 576)	55296	block_12_add[0][0]
block_13_expand_BN (BatchNormal	(None, 16, 16, 576)	2304	block_13_expand[0][0]
block_13_expand_relu (ReLU)	(None, 16, 16, 576)	0	block_13_expand_BN[0][0]
block_13_pad (ZeroPadding2D)	(None, 17, 17, 576)	0	block_13_expand_relu[0][0]
block_13_depthwise (DepthwiseCo	(None, 8, 8, 576)	5184	block_13_pad[0][0]
block_13_depthwise_BN (BatchNor	(None, 8, 8, 576)	2304	block_13_depthwise[0][0]
block_13_depthwise_relu (ReLU)	(None, 8, 8, 576)	0	block_13_depthwise_BN[0][0]
block_13_project (Conv2D)	(None, 8, 8, 160)	92160	block_13_depthwise_relu[0][0]
block_13_project_BN (BatchNorma	(None, 8, 8, 160)	640	block_13_project[0][0]
block_14_expand (Conv2D)	(None, 8, 8, 960)	153600	block_13_project_BN[0][0]
block_14_expand_BN (BatchNormal	(None, 8, 8, 960)	3840	block_14_expand[0][0]
block_14_expand_relu (ReLU)	(None, 8, 8, 960)	0	block_14_expand_BN[0][0]
block_14_depthwise (DepthwiseCo	(None, 8, 8, 960)	8640	block_14_expand_relu[0][0]
block_14_depthwise_BN (BatchNor	(None, 8, 8, 960)	3840	block_14_depthwise[0][0]
block_14_depthwise_relu (ReLU)	(None, 8, 8, 960)	0	block_14_depthwise_BN[0][0]
block_14_project (Conv2D)	(None, 8, 8, 160)	153600	block_14_depthwise_relu[0][0]
block_14_project_BN (BatchNorma	(None, 8, 8, 160)	640	block_14_project[0][0]
block_14_add (Add)	(None, 8, 8, 160)	0	block_13_project_BN[0][0] block_14_project_BN[0][0]
block_15_expand (Conv2D)	(None, 8, 8, 960)	153600	block_14_add[0][0]
block_15_expand_BN (BatchNormal	(None, 8, 8, 960)	3840	block_15_expand[0][0]
block_15_expand_relu (ReLU)	(None, 8, 8, 960)	0	block_15_expand_BN[0][0]
block_15_depthwise (DepthwiseCo	(None, 8, 8, 960)	8640	block_15_expand_relu[0][0]
block_15_depthwise_BN (BatchNor	(None, 8, 8, 960)	3840	block_15_depthwise[0][0]
block_15_depthwise_relu (ReLU)	(None, 8, 8, 960)	0	block_15_depthwise_BN[0][0]
block_15_project (Conv2D)	(None, 8, 8, 160)	153600	block_15_depthwise_relu[0][0]
block_15_project_BN (BatchNorma	(None, 8, 8, 160)	640	block_15_project[0][0]
block_15_add (Add)	(None, 8, 8, 160)	0	block_14_add[0][0] block_15_project_BN[0][0]
block_16_expand (Conv2D)	(None, 8, 8, 960)	153600	block_15_add[0][0]
block_16_expand_BN (BatchNormal	(None, 8, 8, 960)	3840	block_16_expand[0][0]
block_16_expand_relu (ReLU)	(None, 8, 8, 960)	0	block_16_expand_BN[0][0]
block_16_depthwise (DepthwiseCo	(None, 8, 8, 960)	8640	block_16_expand_relu[0][0]
block_16_depthwise_BN (BatchNor	(None, 8, 8, 960)	3840	block_16_depthwise[0][0]
block_16_depthwise_relu (ReLU)	(None, 8, 8, 960)	0	block_16_depthwise_BN[0][0]
block_16_project (Conv2D)	(None, 8, 8, 320)	307200	block_16_depthwise_relu[0][0]
block_16_project_BN (BatchNorma	(None, 8, 8, 320)	1280	block_16_project[0][0]

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Conv_1 (Conv2D)                (None, 8, 8, 1280)    409600    block_16_project_BN[0][0]
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Conv_1_bn (BatchNormalization) (None, 8, 8, 1280)    5120      Conv_1[0][0]
-----
out_relu (ReLU)                (None, 8, 8, 1280)    0         Conv_1_bn[0][0]
-----
global_average_pooling2d (Globa (None, 1280)          0         out_relu[0][0]
-----
dropout (Dropout)              (None, 1280)          0         global_average_pooling2d[0][0]
-----
dense (Dense)                  (None, 1)             1281      dropout[0][0]
=====
Total params: 2,259,265
Trainable params: 1,281
Non-trainable params: 2,257,984
-----
Found 2160 valid image filenames belonging to 1 classes.
Found 540 valid image filenames belonging to 1 classes.
Training Technical Model...
Training Batch size 128
Model Weight path : C:\Users\amaindola\Google Drive\Colab Notebooks\img-quality-assesment\nima\weights\
MobileNetV2_technical.hdf5
Figure path : C:\Users\amaindola\Google Drive\Colab Notebooks\img-quality-assesment\nima\weights\
MobileNetV2_technical.png
2021-08-08 03:01:46.244890: I tensorflow/compiler/mlir/mlir_graph_optimization_pass.cc:176] None of the MLIR
Optimization Passes are enabled (registered 2)
Epoch 1/20
17/17 [=====] - 59s 3s/step - loss: 0.5875 - accuracy: 0.5230 - val_loss: 0.4900 -
val_accuracy: 0.7203
Epoch 2/20
17/17 [=====] - 44s 3s/step - loss: 0.4155 - accuracy: 0.6916 - val_loss: 0.2311 -
val_accuracy: 0.7500
Epoch 3/20
17/17 [=====] - 46s 3s/step - loss: 0.3506 - accuracy: 0.7169 - val_loss: 0.1410 -
val_accuracy: 0.8828
Epoch 4/20
17/17 [=====] - 51s 3s/step - loss: 0.3109 - accuracy: 0.7675 - val_loss: 0.1395 -
val_accuracy: 0.8687
Epoch 5/20
17/17 [=====] - 43s 3s/step - loss: 0.2774 - accuracy: 0.7858 - val_loss: 0.1138 -
val_accuracy: 0.8875
Epoch 6/20
17/17 [=====] - 46s 3s/step - loss: 0.2509 - accuracy: 0.8093 - val_loss: 0.0842 -
val_accuracy: 0.9500
Epoch 7/20
17/17 [=====] - 44s 3s/step - loss: 0.2200 - accuracy: 0.8369 - val_loss: 0.0742 -
val_accuracy: 0.9625
Epoch 8/20
17/17 [=====] - 44s 3s/step - loss: 0.2062 - accuracy: 0.8525 - val_loss: 0.0640 -
val_accuracy: 0.9438
Epoch 9/20
17/17 [=====] - 46s 3s/step - loss: 0.1765 - accuracy: 0.8851 - val_loss: 0.0534 -
val_accuracy: 0.9703
Epoch 10/20
17/17 [=====] - 46s 3s/step - loss: 0.1722 - accuracy: 0.8686 - val_loss: 0.0702 -
val_accuracy: 0.9797
Epoch 11/20
17/17 [=====] - 46s 3s/step - loss: 0.1405 - accuracy: 0.9030 - val_loss: 0.0491 -
val_accuracy: 0.9844
Epoch 12/20
17/17 [=====] - 48s 3s/step - loss: 0.2798 - accuracy: 0.9154 - val_loss: 0.4687 -
val_accuracy: 0.8281
Epoch 13/20
17/17 [=====] - 41s 2s/step - loss: 0.1410 - accuracy: 0.9159 - val_loss: 0.3834 -
val_accuracy: 0.8172

Epoch 00013: ReduceLROnPlateau reducing learning rate to 0.00010000000474974513.
Epoch 14/20
17/17 [=====] - 45s 3s/step - loss: 0.1275 - accuracy: 0.9127 - val_loss: 1.7783 -
val_accuracy: 0.8344
Epoch 15/20
17/17 [=====] - 44s 3s/step - loss: 0.1162 - accuracy: 0.9288 - val_loss: 0.2748 -
val_accuracy: 0.8250

```

```

Epoch 00015: ReduceLROnPlateau reducing learning rate to 1.0000000474974514e-05.
Epoch 00015: early stopping
  Training Time (HH:MM:SS) : 00:11:51
Testing Model...
  Found 300 valid image filenames belonging to 1 classes.
  Testing Batch size:32
2021-08-08 03:13:45.382060: W tensorflow/stream_executor/platform/default/dso_loader.cc:64] Could not load dynamic
library 'cudart64_110.dll'; dlerror: cudart64_110.dll not found
2021-08-08 03:13:45.382306: I tensorflow/stream_executor/cuda/cudart_stub.cc:29] Ignore above cudart dlerror if
you do not have a GPU set up on your machine.
10/10 [=====] - ETA: 0s2021-08-08 03:14:01.976924: W tensorflow/stream_executor/platform/
default/dso_loader.cc:64] Could not load dynamic library 'cudart64_110.dll'; dlerror: cudart64_110.dll not found
2021-08-08 03:14:01.977289: I tensorflow/stream_executor/cuda/cudart_stub.cc:29] Ignore above cudart dlerror if
you do not have a GPU set up on your machine.
10/10 [=====] - 29s 1s/step
Traceback (most recent call last):
  File "C:/Users/amaindola/Google Drive/Colab Notebooks/img-quality-assesment/nima/model/train_model.py", line 183
, in <module>
    tech_train_result_df, tech_test_df, tech_weight_file = train_technical_model(p_model_name=arg_model_name,
  File "C:/Users/amaindola/Google Drive/Colab Notebooks/img-quality-assesment/nima/model/train_model.py", line 116
, in train_technical_model
    df_test['rating_predict'] = predictions
  File "C:\Users\amaindola\Anaconda3\envs\img-quality-assesment\lib\site-packages\pandas\core\frame.py", line 3044
, in __setitem__
    self._set_item(key, value)
  File "C:\Users\amaindola\Anaconda3\envs\img-quality-assesment\lib\site-packages\pandas\core\frame.py", line 3120
, in _set_item
    value = self._sanitize_column(key, value)
  File "C:\Users\amaindola\Anaconda3\envs\img-quality-assesment\lib\site-packages\pandas\core\frame.py", line 3768
, in _sanitize_column
    value = sanitize_index(value, self.index)
  File "C:\Users\amaindola\Anaconda3\envs\img-quality-assesment\lib\site-packages\pandas\core\internals\
construction.py", line 747, in sanitize_index
    raise ValueError(
ValueError: Length of values (320) does not match length of index (300)

Process finished with exit code 1

```