









Found 41321 images belonging to 8 classes.

Found 7189 images belonging to 8 classes.

{'anger': 0, 'contempt': 1, 'disgust': 2, 'fear': 3, 'happy': 4, 'neutral': 5, 'sad': 6, 'surprise': 7}

2024-12-02 12:44:52.018950: I tensorflow/core/platform/cpu\_feature\_guard.cc:193] 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.

2024-12-02 12:44:52.774086: I tensorflow/core/common\_runtime/gpu/gpu\_device.cc:1616] Created device /job:localhost/replica:0/task:0/device:GPU:0 with 5468 MB memory: -> device: 0, name: NVIDIA GeForce RTX 3070 Laptop GPU, pci bus id: 0000:01:00.0, compute capability: 8.6

Model: "model"

Layer (type) Output Shape Param # Connected to

```
input_1 (InputLayer)
                        [(None, 48, 48, 1)] 0
                                                 []
conv2d (Conv2D)
                        (None, 48, 48, 64) 640
                                                  ['input_1[0][0]']
                                                           ['conv2d[0][0]']
batch_normalization (BatchNorm (None, 48, 48, 64) 256
alization)
max_pooling2d (MaxPooling2D) (None, 24, 24, 64) 0
                                                        ['batch_normalization[0][0]']
conv2d_1 (Conv2D)
                         (None, 24, 24, 128) 73856
                                                      ['max_pooling2d[0][0]']
batch_normalization_1 (BatchNo (None, 24, 24, 128) 512
                                                           ['conv2d_1[0][0]']
rmalization)
max_pooling2d_1 (MaxPooling2D) (None, 12, 12, 128) 0
                                                           ['batch_normalization_1[0][0]']
conv2d_2 (Conv2D)
                         (None, 12, 12, 256) 295168
                                                      ['max_pooling2d_1[0][0]']
batch_normalization_2 (BatchNo (None, 12, 12, 256) 1024
                                                            ['conv2d_2[0][0]']
rmalization)
max_pooling2d_2 (MaxPooling2D) (None, 6, 6, 256) 0
                                                         ['batch_normalization_2[0][0]']
global_average_pooling2d (Glob (None, 256)
                                                     ['max_pooling2d_2[0][0]']
alAveragePooling2D)
dense (Dense)
                      (None, 16)
                                     4112
                                             ['global_average_pooling2d[0][0]'
                             ]
```

dense\_1 (Dense) (None, 256) 4352 ['dense[0][0]']

multiply (Multiply) (None, 6, 6, 256) 0 ['max\_pooling2d\_2[0][0]', 'dense\_1[0][0]']

conv2d\_4 (Conv2D) (None, 3, 3, 512) 1180160 ['multiply[0][0]']

batch\_normalization\_4 (BatchNo (None, 3, 3, 512) 2048 ['conv2d\_4[0][0]'] rmalization)

re\_lu (ReLU) (None, 3, 3, 512) 0 ['batch\_normalization\_4[0][0]']

conv2d\_5 (Conv2D) (None, 3, 3, 512) 2359808 ['re\_lu[0][0]']

conv2d\_3 (Conv2D) (None, 3, 3, 512) 131584 ['multiply[0][0]']

batch\_normalization\_5 (BatchNo (None, 3, 3, 512) 2048 ['conv2d\_5[0][0]'] rmalization)

batch\_normalization\_3 (BatchNo (None, 3, 3, 512) 2048 ['conv2d\_3[0][0]'] rmalization)

add (Add) (None, 3, 3, 512) 0 ['batch\_normalization\_5[0][0]', 'batch\_normalization\_3[0][0]']

re\_lu\_1 (ReLU) (None, 3, 3, 512) 0 ['add[0][0]']

conv2d\_7 (Conv2D) (None, 2, 2, 1024) 4719616 ['re\_lu\_1[0][0]']

batch\_normalization\_7 (BatchNo (None, 2, 2, 1024) 4096 ['conv2d\_7[0][0]'] rmalization)

re\_lu\_2 (ReLU) (None, 2, 2, 1024) 0 ['batch\_normalization\_7[0][0]']

conv2d\_8 (Conv2D) (None, 2, 2, 1024) 9438208 ['re\_lu\_2[0][0]']

conv2d\_6 (Conv2D) (None, 2, 2, 1024) 525312 ['re\_lu\_1[0][0]']

batch\_normalization\_8 (BatchNo (None, 2, 2, 1024) 4096 ['conv2d\_8[0][0]'] rmalization)

batch\_normalization\_6 (BatchNo (None, 2, 2, 1024) 4096 ['conv2d\_6[0][0]'] rmalization)

add\_1 (Add) (None, 2, 2, 1024) 0 ['batch\_normalization\_8[0][0]', 'batch\_normalization\_6[0][0]']

re\_lu\_3 (ReLU) (None, 2, 2, 1024) 0 ['add\_1[0][0]']

conv2d\_10 (Conv2D) (None, 1, 1, 2048) 18876416 ['re\_lu\_3[0][0]']

batch\_normalization\_10 (BatchN (None, 1, 1, 2048) 8192 ['conv2d\_10[0][0]'] ormalization)

re\_lu\_4 (ReLU) (None, 1, 1, 2048) 0 ['batch\_normalization\_10[0][0]']

conv2d\_11 (Conv2D) (None, 1, 1, 2048) 37750784 ['re\_lu\_4[0][0]']

conv2d\_9 (Conv2D) (None, 1, 1, 2048) 2099200 ['re\_lu\_3[0][0]']

batch\_normalization\_11 (BatchN (None, 1, 1, 2048) 8192 ['conv2d\_11[0][0]'] ormalization)

batch\_normalization\_9 (BatchNo (None, 1, 1, 2048) 8192 ['conv2d\_9[0][0]'] rmalization)

add\_2 (Add) (None, 1, 1, 2048) 0 ['batch\_normalization\_11[0][0]', 'batch\_normalization\_9[0][0]']

re\_lu\_5 (ReLU) (None, 1, 1, 2048) 0 ['add\_2[0][0]']

global\_average\_pooling2d\_1 (Gl (None, 2048) 0 ['re\_lu\_5[0][0]'] obalAveragePooling2D)

dense\_2 (Dense) (None, 256) 524544 ['global\_average\_pooling2d\_1[0][0]

dropout (Dropout) (None, 256) 0 ['dense\_2[0][0]']

dense\_3 (Dense) (None, 128) 32896 ['dropout[0][0]']

dropout\_1 (Dropout) (None, 128) 0 ['dense\_3[0][0]']

emotion\_output (Dense) (None, 8) 1032 ['dropout\_1[0][0]']

stress\_output (Dense) (None, 1) 129 ['dropout\_1[0][0]']

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Total params: 78,062,617

Trainable params: 78,040,217

Non-trainable params: 22,400

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# Epoch 1/100

2024-12-02 12:44:56.254720: I tensorflow/stream\_executor/cuda/cuda\_dnn.cc:384] Loaded cuDNN version 8100

2024-12-02 12:44:58.224315: I tensorflow/stream\_executor/cuda/cuda\_blas.cc:1614] TensorFloat-32 will be used for the matrix multiplication. This will only be logged once.

645/645 [============] - 62s 87ms/step - loss: 2.2652 -

emotion\_output\_loss: 2.0116 - stress\_output\_loss: 0.2536 - emotion\_output\_accuracy: 0.2291 -

stress\_output\_mae: 0.3349 - val\_loss: 2.1104 - val\_emotion\_output\_loss: 1.9955 -

val\_stress\_output\_loss: 0.1149 - val\_emotion\_output\_accuracy: 0.2302 - val\_stress\_output\_mae: 0.1875 - lr: 1.0000e-04

Epoch 2/100

645/645 [============] - 55s 86ms/step - loss: 1.9703 -

emotion\_output\_loss: 1.8173 - stress\_output\_loss: 0.1531 - emotion\_output\_accuracy: 0.2863 -

stress\_output\_mae: 0.2665 - val\_loss: 2.4049 - val\_emotion\_output\_loss: 2.2919 -

val\_stress\_output\_loss: 0.1130 - val\_emotion\_output\_accuracy: 0.1724 - val\_stress\_output\_mae:

0.2032 - lr: 1.0000e-04

Epoch 3/100

emotion\_output\_loss: 1.7035 - stress\_output\_loss: 0.1445 - emotion\_output\_accuracy: 0.3223 -

stress\_output\_mae: 0.2574 - val\_loss: 2.2576 - val\_emotion\_output\_loss: 2.1452 -

val\_stress\_output\_loss: 0.1124 - val\_emotion\_output\_accuracy: 0.2208 - val\_stress\_output\_mae:

0.1933 - lr: 1.0000e-04

Epoch 4/100

emotion\_output\_loss: 1.6140 - stress\_output\_loss: 0.1349 - emotion\_output\_accuracy: 0.3537 -

stress\_output\_mae: 0.2464 - val\_loss: 2.1047 - val\_emotion\_output\_loss: 1.9933 -

val\_stress\_output\_loss: 0.1114 - val\_emotion\_output\_accuracy: 0.2626 - val\_stress\_output\_mae:

0.1951 - lr: 1.0000e-04

Epoch 5/100

```
emotion_output_loss: 1.5417 - stress_output_loss: 0.1287 - emotion_output_accuracy: 0.3903 -
stress_output_mae: 0.2376 - val_loss: 1.8951 - val_emotion_output_loss: 1.7845 -
val_stress_output_loss: 0.1106 - val_emotion_output_accuracy: 0.3172 - val_stress_output_mae:
0.2032 - lr: 1.0000e-04
Epoch 6/100
emotion_output_loss: 1.4716 - stress_output_loss: 0.1251 - emotion_output_accuracy: 0.4253 -
stress_output_mae: 0.2344 - val_loss: 1.9133 - val_emotion_output_loss: 1.8024 -
val_stress_output_loss: 0.1109 - val_emotion_output_accuracy: 0.3502 - val_stress_output_mae:
0.2046 - lr: 1.0000e-04
Epoch 7/100
645/645 [===============================] - 58s 89ms/step - loss: 1.5326 -
emotion_output_loss: 1.4121 - stress_output_loss: 0.1205 - emotion_output_accuracy: 0.4511 -
stress_output_mae: 0.2285 - val_loss: 1.7935 - val_emotion_output_loss: 1.6833 -
val_stress_output_loss: 0.1102 - val_emotion_output_accuracy: 0.3744 - val_stress_output_mae:
0.2027 - lr: 1.0000e-04
Epoch 8/100
emotion output loss: 1.3572 - stress output loss: 0.1172 - emotion output accuracy: 0.4800 -
stress_output_mae: 0.2243 - val_loss: 1.6349 - val_emotion_output_loss: 1.5249 -
val_stress_output_loss: 0.1100 - val_emotion_output_accuracy: 0.4040 - val_stress_output_mae:
0.2083 - lr: 1.0000e-04
Epoch 9/100
emotion_output_loss: 1.3150 - stress_output_loss: 0.1144 - emotion_output_accuracy: 0.4975 -
stress_output_mae: 0.2215 - val_loss: 2.2814 - val_emotion_output_loss: 2.1716 -
val stress output loss: 0.1098 - val emotion output accuracy: 0.3391 - val stress output mae:
0.2087 - lr: 1.0000e-04
Epoch 10/100
emotion_output_loss: 1.2724 - stress_output_loss: 0.1126 - emotion_output_accuracy: 0.5157 -
stress output mae: 0.2198 - val loss: 1.8885 - val emotion output loss: 1.7790 -
val_stress_output_loss: 0.1095 - val_emotion_output_accuracy: 0.4023 - val_stress_output_mae:
0.2160 - lr: 1.0000e-04
Epoch 11/100
emotion_output_loss: 1.2326 - stress_output_loss: 0.1113 - emotion_output_accuracy: 0.5319 -
```

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stress output mae: 0.2191 - val loss: 1.6835 - val emotion output loss: 1.5740 -
val_stress_output_loss: 0.1095 - val_emotion_output_accuracy: 0.4369 - val_stress_output_mae:
0.2157 - lr: 1.0000e-04
Epoch 12/100
645/645 [==============================] - 57s 88ms/step - loss: 1.3026 -
emotion_output_loss: 1.1921 - stress_output_loss: 0.1105 - emotion_output_accuracy: 0.5484 -
stress_output_mae: 0.2189 - val_loss: 1.4485 - val_emotion_output_loss: 1.3390 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.4856 - val_stress_output_mae:
0.2199 - lr: 1.0000e-04
Epoch 13/100
emotion output loss: 1.1628 - stress output loss: 0.1100 - emotion output accuracy: 0.5600 -
stress_output_mae: 0.2189 - val_loss: 1.8582 - val_emotion_output_loss: 1.7487 -
val_stress_output_loss: 0.1095 - val_emotion_output_accuracy: 0.4284 - val_stress_output_mae:
0.2171 - lr: 1.0000e-04
Epoch 14/100
645/645 [===========] - 57s 89ms/step - loss: 1.2485 -
emotion_output_loss: 1.1387 - stress_output_loss: 0.1098 - emotion_output_accuracy: 0.5712 -
stress_output_mae: 0.2188 - val_loss: 1.5053 - val_emotion_output_loss: 1.3959 -
val stress output loss: 0.1094 - val emotion output accuracy: 0.4937 - val stress output mae:
0.2180 - lr: 1.0000e-04
Epoch 15/100
645/645 [===============================] - 57s 89ms/step - loss: 1.2286 -
emotion_output_loss: 1.1189 - stress_output_loss: 0.1097 - emotion_output_accuracy: 0.5804 -
stress output mae: 0.2188 - val loss: 1.3919 - val emotion output loss: 1.2825 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5059 - val_stress_output_mae:
0.2183 - lr: 1.0000e-04
Epoch 16/100
emotion output loss: 1.0940 - stress output loss: 0.1095 - emotion output accuracy: 0.5908 -
stress_output_mae: 0.2187 - val_loss: 1.3790 - val_emotion_output_loss: 1.2696 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5181 - val_stress_output_mae:
0.2178 - lr: 1.0000e-04
Epoch 17/100
645/645 [============== - 57s 89ms/step - loss: 1.1853 -
```

emotion\_output\_loss: 1.0758 - stress\_output\_loss: 0.1095 - emotion\_output\_accuracy: 0.5992 -

stress\_output\_mae: 0.2188 - val\_loss: 1.3278 - val\_emotion\_output\_loss: 1.2184 -

```
val stress output loss: 0.1095 - val emotion output accuracy: 0.5412 - val stress output mae:
0.2202 - lr: 1.0000e-04
Epoch 18/100
645/645 [=============] - 57s 89ms/step - loss: 1.1576 -
emotion_output_loss: 1.0482 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6106 -
stress_output_mae: 0.2187 - val_loss: 2.1096 - val_emotion_output_loss: 2.0000 -
val_stress_output_loss: 0.1096 - val_emotion_output_accuracy: 0.4103 - val_stress_output_mae:
0.2176 - lr: 1.0000e-04
Epoch 19/100
645/645 [============ - 57s 89ms/step - loss: 1.1426 -
emotion_output_loss: 1.0332 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6176 -
stress output mae: 0.2188 - val loss: 1.3210 - val emotion output loss: 1.2117 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5414 - val_stress_output_mae:
0.2183 - lr: 1.0000e-04
Epoch 20/100
645/645 [===============================] - 57s 88ms/step - loss: 1.1210 -
emotion output loss: 1.0116 - stress output loss: 0.1094 - emotion output accuracy: 0.6264 -
stress_output_mae: 0.2188 - val_loss: 1.3383 - val_emotion_output_loss: 1.2289 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5386 - val_stress_output_mae:
0.2187 - lr: 1.0000e-04
Epoch 21/100
emotion_output_loss: 0.9983 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6267 -
stress_output_mae: 0.2188 - val_loss: 1.2990 - val_emotion_output_loss: 1.1896 -
val stress output loss: 0.1094 - val emotion output accuracy: 0.5451 - val stress output mae:
0.2184 - lr: 1.0000e-04
Epoch 22/100
645/645 [============] - 58s 89ms/step - loss: 1.0926 -
emotion_output_loss: 0.9833 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6343 -
stress output mae: 0.2187 - val loss: 1.3166 - val emotion output loss: 1.2072 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5485 - val_stress_output_mae:
0.2190 - lr: 1.0000e-04
Epoch 23/100
emotion output loss: 0.9727 - stress output loss: 0.1094 - emotion output accuracy: 0.6411 -
stress_output_mae: 0.2188 - val_loss: 3.4480 - val_emotion_output_loss: 3.3387 -
```

val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.3352 - val\_stress\_output\_mae:

0.2188 - lr: 1.0000e-04

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Epoch 24/100
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645/645 [============] - 57s 89ms/step - loss: 1.0583 -
emotion_output_loss: 0.9489 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6495 -
stress_output_mae: 0.2188 - val_loss: 1.8469 - val_emotion_output_loss: 1.7375 -
val stress output loss: 0.1094 - val emotion output accuracy: 0.4653 - val stress output mae:
0.2187 - lr: 1.0000e-04
Epoch 25/100
645/645 [============] - 57s 89ms/step - loss: 1.0482 -
emotion_output_loss: 0.9388 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6519 -
stress_output_mae: 0.2188 - val_loss: 1.3103 - val_emotion_output_loss: 1.2009 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5460 - val_stress_output_mae:
0.2190 - lr: 1.0000e-04
Epoch 26/100
645/645 [============] - 57s 89ms/step - loss: 1.0408 -
emotion_output_loss: 0.9314 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6592 -
stress output mae: 0.2188 - val loss: 2.4864 - val emotion output loss: 2.3771 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.4019 - val_stress_output_mae:
0.2184 - lr: 1.0000e-04
Epoch 27/100
0.9102 - stress output loss: 0.1094 - emotion output accuracy: 0.6662 - stress output mae:
0.2187
Epoch 27: ReduceLROnPlateau reducing learning rate to 4.999999873689376e-05.
645/645 [============] - 57s 88ms/step - loss: 1.0196 -
emotion_output_loss: 0.9102 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6662 -
stress output mae: 0.2187 - val loss: 2.7397 - val emotion output loss: 2.6304 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.3944 - val_stress_output_mae:
0.2187 - lr: 1.0000e-04
Epoch 28/100
emotion output loss: 0.8670 - stress output loss: 0.1094 - emotion output accuracy: 0.6789 -
stress_output_mae: 0.2188 - val_loss: 1.2131 - val_emotion_output_loss: 1.1038 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5799 - val_stress_output_mae:
0.2188 - lr: 5.0000e-05
Epoch 29/100
emotion output loss: 0.8436 - stress output loss: 0.1094 - emotion output accuracy: 0.6892 -
```

```
stress output mae: 0.2188 - val loss: 1.2208 - val emotion output loss: 1.1114 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5854 - val_stress_output_mae:
0.2188 - lr: 5.0000e-05
Epoch 30/100
645/645 [==============================] - 57s 88ms/step - loss: 0.9545 -
emotion_output_loss: 0.8451 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6881 -
stress_output_mae: 0.2187 - val_loss: 1.1960 - val_emotion_output_loss: 1.0866 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5819 - val_stress_output_mae:
0.2187 - lr: 5.0000e-05
Epoch 31/100
emotion output loss: 0.8193 - stress output loss: 0.1094 - emotion output accuracy: 0.7001 -
stress_output_mae: 0.2188 - val_loss: 1.1860 - val_emotion_output_loss: 1.0766 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5933 - val_stress_output_mae:
0.2187 - lr: 5.0000e-05
Epoch 32/100
emotion_output_loss: 0.8169 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.6988 -
stress_output_mae: 0.2187 - val_loss: 1.1921 - val_emotion_output_loss: 1.0827 -
val stress output loss: 0.1094 - val emotion output accuracy: 0.5929 - val stress output mae:
0.2186 - lr: 5.0000e-05
Epoch 33/100
emotion_output_loss: 0.8095 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7008 -
stress_output_mae: 0.2187 - val_loss: 1.2051 - val_emotion_output_loss: 1.0957 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5910 - val_stress_output_mae:
0.2188 - lr: 5.0000e-05
Epoch 34/100
emotion output loss: 0.7975 - stress output loss: 0.1094 - emotion output accuracy: 0.7077 -
stress_output_mae: 0.2188 - val_loss: 1.2250 - val_emotion_output_loss: 1.1157 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5942 - val_stress_output_mae:
0.2188 - lr: 5.0000e-05
Epoch 35/100
645/645 [============== - 57s 88ms/step - loss: 0.9031 -
```

emotion\_output\_loss: 0.7937 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7074 -

stress\_output\_mae: 0.2188 - val\_loss: 2.2949 - val\_emotion\_output\_loss: 2.1855 -

val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.4448 - val\_stress\_output\_mae: 0.2187 - lr: 5.0000e-05

# Epoch 36/100

645/645 [===============] - 57s 89ms/step - loss: 0.8939 - emotion\_output\_loss: 0.7845 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7119 - stress\_output\_mae: 0.2187 - val\_loss: 1.2566 - val\_emotion\_output\_loss: 1.1472 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.5783 - val\_stress\_output\_mae: 0.2187 - lr: 5.0000e-05

# Epoch 37/100

645/645 [============] - 57s 89ms/step - loss: 0.8892 - emotion\_output\_loss: 0.7799 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7136 - stress\_output\_mae: 0.2187 - val\_loss: 1.2454 - val\_emotion\_output\_loss: 1.1360 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.5855 - val\_stress\_output\_mae: 0.2187 - lr: 5.0000e-05

#### Epoch 38/100

645/645 [=============] - 57s 89ms/step - loss: 0.8781 - emotion\_output\_loss: 0.7687 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7173 - stress\_output\_mae: 0.2187 - val\_loss: 1.1695 - val\_emotion\_output\_loss: 1.0601 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6046 - val\_stress\_output\_mae: 0.2188 - lr: 5.0000e-05

### Epoch 39/100

645/645 [============] - 57s 89ms/step - loss: 0.8724 - emotion\_output\_loss: 0.7630 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7206 - stress\_output\_mae: 0.2187 - val\_loss: 1.1757 - val\_emotion\_output\_loss: 1.0663 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.5996 - val\_stress\_output\_mae: 0.2187 - lr: 5.0000e-05

# Epoch 40/100

645/645 [============] - 57s 89ms/step - loss: 0.8664 - emotion\_output\_loss: 0.7570 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7214 - stress\_output\_mae: 0.2188 - val\_loss: 1.1887 - val\_emotion\_output\_loss: 1.0794 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6006 - val\_stress\_output\_mae: 0.2187 - lr: 5.0000e-05

#### Epoch 41/100

645/645 [=============] - 57s 89ms/step - loss: 0.8660 - emotion\_output\_loss: 0.7566 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7223 - stress\_output\_mae: 0.2187 - val\_loss: 1.1577 - val\_emotion\_output\_loss: 1.0484 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6087 - val\_stress\_output\_mae: 0.2188 - lr: 5.0000e-05

```
Epoch 42/100
```

645/645 [=============] - 57s 88ms/step - loss: 0.8570 - emotion\_output\_loss: 0.7476 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7269 - stress\_output\_mae: 0.2188 - val\_loss: 1.1950 - val\_emotion\_output\_loss: 1.0856 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6048 - val\_stress\_output\_mae: 0.2186 - lr: 5.0000e-05

### Epoch 43/100

645/645 [============] - 57s 88ms/step - loss: 0.8468 - emotion\_output\_loss: 0.7374 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7302 - stress\_output\_mae: 0.2188 - val\_loss: 1.3138 - val\_emotion\_output\_loss: 1.2044 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.5696 - val\_stress\_output\_mae: 0.2188 - lr: 5.0000e-05

### Epoch 44/100

645/645 [============] - 57s 88ms/step - loss: 0.8421 - emotion\_output\_loss: 0.7328 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7293 - stress\_output\_mae: 0.2188 - val\_loss: 1.1641 - val\_emotion\_output\_loss: 1.0548 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6067 - val\_stress\_output\_mae: 0.2188 - lr: 5.0000e-05

### Epoch 45/100

645/645 [=============] - 57s 89ms/step - loss: 0.8401 - emotion\_output\_loss: 0.7307 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7313 - stress\_output\_mae: 0.2188 - val\_loss: 1.1605 - val\_emotion\_output\_loss: 1.0512 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6116 - val\_stress\_output\_mae: 0.2187 - lr: 5.0000e-05

# Epoch 46/100

645/645 [============] - 57s 88ms/step - loss: 0.8302 - emotion\_output\_loss: 0.7208 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7355 - stress\_output\_mae: 0.2188 - val\_loss: 1.1781 - val\_emotion\_output\_loss: 1.0688 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6066 - val\_stress\_output\_mae: 0.2187 - lr: 5.0000e-05

### Epoch 47/100

645/645 [=============] - 58s 89ms/step - loss: 0.8238 - emotion\_output\_loss: 0.7144 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7385 - stress\_output\_mae: 0.2188 - val\_loss: 1.1643 - val\_emotion\_output\_loss: 1.0550 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6147 - val\_stress\_output\_mae: 0.2190 - lr: 5.0000e-05

#### Epoch 48/100

```
645/645 [============== - 57s 88ms/step - loss: 0.8168 -
emotion_output_loss: 0.7074 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7404 -
stress output mae: 0.2187 - val loss: 1.1806 - val emotion output loss: 1.0712 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5992 - val_stress_output_mae:
0.2188 - lr: 5.0000e-05
Epoch 49/100
emotion_output_loss: 0.7083 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7428 -
stress_output_mae: 0.2188 - val_loss: 1.1529 - val_emotion_output_loss: 1.0435 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6136 - val_stress_output_mae:
0.2187 - lr: 5.0000e-05
Epoch 50/100
emotion_output_loss: 0.6973 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7448 -
stress_output_mae: 0.2187 - val_loss: 1.1896 - val_emotion_output_loss: 1.0802 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6077 - val_stress_output_mae:
0.2187 - lr: 5.0000e-05
Epoch 51/100
emotion output loss: 0.6945 - stress output loss: 0.1094 - emotion output accuracy: 0.7433 -
stress_output_mae: 0.2188 - val_loss: 1.2350 - val_emotion_output_loss: 1.1256 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5986 - val_stress_output_mae:
0.2187 - lr: 5.0000e-05
Epoch 52/100
0.6894 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7493 - stress_output_mae:
0.2187
Epoch 52: ReduceLROnPlateau reducing learning rate to 2.499999936844688e-05.
645/645 [==============================] - 57s 89ms/step - loss: 0.7988 -
emotion output loss: 0.6894 - stress output loss: 0.1094 - emotion output accuracy: 0.7493 -
stress_output_mae: 0.2187 - val_loss: 1.2144 - val_emotion_output_loss: 1.1050 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.5995 - val_stress_output_mae:
0.2187 - lr: 5.0000e-05
Epoch 53/100
645/645 [============== - 57s 88ms/step - loss: 0.7703 -
emotion_output_loss: 0.6609 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7588 -
stress_output_mae: 0.2188 - val_loss: 1.1918 - val_emotion_output_loss: 1.0824 -
```

val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6129 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

## Epoch 54/100

645/645 [===============] - 58s 89ms/step - loss: 0.7578 - emotion\_output\_loss: 0.6484 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7641 - stress\_output\_mae: 0.2188 - val\_loss: 1.1279 - val\_emotion\_output\_loss: 1.0186 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6249 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

# Epoch 55/100

645/645 [============] - 58s 89ms/step - loss: 0.7537 - emotion\_output\_loss: 0.6444 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7638 - stress\_output\_mae: 0.2188 - val\_loss: 1.1503 - val\_emotion\_output\_loss: 1.0409 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6229 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

#### Epoch 56/100

645/645 [=============] - 57s 89ms/step - loss: 0.7460 - emotion\_output\_loss: 0.6367 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7685 - stress\_output\_mae: 0.2187 - val\_loss: 1.1563 - val\_emotion\_output\_loss: 1.0469 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6217 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

### Epoch 57/100

645/645 [============] - 57s 89ms/step - loss: 0.7345 - emotion\_output\_loss: 0.6252 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7720 - stress\_output\_mae: 0.2188 - val\_loss: 1.1326 - val\_emotion\_output\_loss: 1.0232 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6292 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

# Epoch 58/100

645/645 [============] - 57s 88ms/step - loss: 0.7349 - emotion\_output\_loss: 0.6255 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7736 - stress\_output\_mae: 0.2188 - val\_loss: 1.1435 - val\_emotion\_output\_loss: 1.0341 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6288 - val\_stress\_output\_mae: 0.2187 - lr: 2.5000e-05

#### Epoch 59/100

645/645 [=============] - 57s 88ms/step - loss: 0.7291 - emotion\_output\_loss: 0.6198 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7741 - stress\_output\_mae: 0.2188 - val\_loss: 1.1664 - val\_emotion\_output\_loss: 1.0570 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6244 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

```
Epoch 60/100
```

645/645 [============] - 57s 89ms/step - loss: 0.7216 - emotion\_output\_loss: 0.6122 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7764 - stress\_output\_mae: 0.2187 - val\_loss: 1.2314 - val\_emotion\_output\_loss: 1.1221 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6052 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

Epoch 61/100

645/645 [===============] - 57s 89ms/step - loss: 0.7184 - emotion\_output\_loss: 0.6090 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7783 - stress\_output\_mae: 0.2188 - val\_loss: 1.2652 - val\_emotion\_output\_loss: 1.1558 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.5947 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

### Epoch 62/100

645/645 [============] - 57s 89ms/step - loss: 0.7192 - emotion\_output\_loss: 0.6098 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7769 - stress\_output\_mae: 0.2187 - val\_loss: 1.1311 - val\_emotion\_output\_loss: 1.0217 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6335 - val\_stress\_output\_mae: 0.2187 - lr: 2.5000e-05

### Epoch 63/100

645/645 [=============] - 57s 88ms/step - loss: 0.7120 - emotion\_output\_loss: 0.6026 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7811 - stress\_output\_mae: 0.2188 - val\_loss: 1.3640 - val\_emotion\_output\_loss: 1.2547 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.5864 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

### Epoch 64/100

645/645 [============] - 57s 89ms/step - loss: 0.7077 - emotion\_output\_loss: 0.5983 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7822 - stress\_output\_mae: 0.2187 - val\_loss: 1.1367 - val\_emotion\_output\_loss: 1.0274 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6307 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

### Epoch 65/100

645/645 [============] - 57s 88ms/step - loss: 0.7075 - emotion\_output\_loss: 0.5981 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.7833 - stress\_output\_mae: 0.2188 - val\_loss: 1.1388 - val\_emotion\_output\_loss: 1.0294 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6311 - val\_stress\_output\_mae: 0.2188 - lr: 2.5000e-05

#### Epoch 66/100

```
emotion_output_loss: 0.5902 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7852 -
stress_output_mae: 0.2187 - val_loss: 1.1933 - val_emotion_output_loss: 1.0839 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6205 - val_stress_output_mae:
0.2188 - lr: 2.5000e-05
Epoch 67/100
0.5863 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7883 - stress_output_mae:
0.2187
Epoch 67: ReduceLROnPlateau reducing learning rate to 1.249999968422344e-05.
645/645 [==============================] - 57s 88ms/step - loss: 0.6957 -
emotion output loss: 0.5863 - stress output loss: 0.1094 - emotion output accuracy: 0.7883 -
stress_output_mae: 0.2187 - val_loss: 1.1404 - val_emotion_output_loss: 1.0310 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6317 - val_stress_output_mae:
0.2187 - lr: 2.5000e-05
Epoch 68/100
645/645 [============] - 57s 88ms/step - loss: 0.6785 -
emotion_output_loss: 0.5691 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7944 -
stress_output_mae: 0.2187 - val_loss: 1.1304 - val_emotion_output_loss: 1.0210 -
val stress output loss: 0.1094 - val emotion output accuracy: 0.6330 - val stress output mae:
0.2188 - lr: 1.2500e-05
Epoch 69/100
645/645 [==============================] - 57s 89ms/step - loss: 0.6737 -
emotion_output_loss: 0.5643 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7950 -
stress output mae: 0.2188 - val loss: 1.2062 - val emotion output loss: 1.0968 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6208 - val_stress_output_mae:
0.2188 - lr: 1.2500e-05
Epoch 70/100
emotion output loss: 0.5601 - stress output loss: 0.1094 - emotion output accuracy: 0.7960 -
stress_output_mae: 0.2188 - val_loss: 1.2708 - val_emotion_output_loss: 1.1614 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6073 - val_stress_output_mae:
0.2187 - lr: 1.2500e-05
Epoch 71/100
emotion_output_loss: 0.5547 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.8017 -
stress_output_mae: 0.2188 - val_loss: 1.2848 - val_emotion_output_loss: 1.1754 -
```

```
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6119 - val_stress_output_mae: 0.2188 - lr: 1.2500e-05

Epoch 72/100

645/645 [========================] - 57s 89ms/step - loss: 0.6623 - emotion_output_loss: 0.5530 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.7995 -
```

val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6360 - val\_stress\_output\_mae: 0.2188 - lr: 1.2500e-05

stress\_output\_mae: 0.2188 - val\_loss: 1.1347 - val\_emotion\_output\_loss: 1.0253 -

Epoch 73/100

645/645 [============] - 57s 89ms/step - loss: 0.6571 - emotion\_output\_loss: 0.5477 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8006 - stress\_output\_mae: 0.2188 - val\_loss: 1.1995 - val\_emotion\_output\_loss: 1.0902 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6243 - val\_stress\_output\_mae: 0.2188 - lr: 1.2500e-05

Epoch 74/100

645/645 [============] - 57s 89ms/step - loss: 0.6563 - emotion\_output\_loss: 0.5470 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8019 - stress\_output\_mae: 0.2188 - val\_loss: 1.2738 - val\_emotion\_output\_loss: 1.1644 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6130 - val\_stress\_output\_mae: 0.2188 - lr: 1.2500e-05

Epoch 75/100

645/645 [============] - 57s 89ms/step - loss: 0.6484 - emotion\_output\_loss: 0.5391 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8048 - stress\_output\_mae: 0.2188 - val\_loss: 1.1253 - val\_emotion\_output\_loss: 1.0160 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6463 - val\_stress\_output\_mae: 0.2187 - lr: 1.2500e-05

Epoch 76/100

645/645 [============] - 58s 90ms/step - loss: 0.6543 - emotion\_output\_loss: 0.5449 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8020 - stress\_output\_mae: 0.2188 - val\_loss: 1.1287 - val\_emotion\_output\_loss: 1.0193 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6370 - val\_stress\_output\_mae: 0.2187 - lr: 1.2500e-05

Epoch 77/100

645/645 [=============] - 57s 88ms/step - loss: 0.6466 - emotion\_output\_loss: 0.5373 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8039 - stress\_output\_mae: 0.2187 - val\_loss: 1.1422 - val\_emotion\_output\_loss: 1.0328 - val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6434 - val\_stress\_output\_mae: 0.2187 - lr: 1.2500e-05

```
Epoch 78/100
```

```
645/645 [============] - 57s 88ms/step - loss: 0.6447 -
emotion_output_loss: 0.5353 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.8035 -
stress_output_mae: 0.2188 - val_loss: 1.1778 - val_emotion_output_loss: 1.0684 -
val stress output loss: 0.1094 - val emotion output accuracy: 0.6275 - val stress output mae:
0.2187 - lr: 1.2500e-05
Epoch 79/100
645/645 [============] - 57s 89ms/step - loss: 0.6389 -
emotion_output_loss: 0.5295 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.8084 -
stress_output_mae: 0.2188 - val_loss: 1.2071 - val_emotion_output_loss: 1.0977 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6221 - val_stress_output_mae:
0.2188 - lr: 1.2500e-05
Epoch 80/100
0.5322 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.8053 - stress_output_mae:
0.2188
Epoch 80: ReduceLROnPlateau reducing learning rate to 6.24999984211172e-06.
645/645 [============] - 57s 89ms/step - loss: 0.6416 -
emotion_output_loss: 0.5322 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.8053 -
stress_output_mae: 0.2188 - val_loss: 1.1434 - val_emotion_output_loss: 1.0340 -
val stress output loss: 0.1094 - val emotion output accuracy: 0.6388 - val stress output mae:
0.2188 - lr: 1.2500e-05
Epoch 81/100
645/645 [============] - 57s 88ms/step - loss: 0.6285 -
emotion_output_loss: 0.5191 - stress_output_loss: 0.1094 - emotion_output_accuracy: 0.8103 -
stress output mae: 0.2188 - val loss: 1.1579 - val emotion output loss: 1.0485 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6369 - val_stress_output_mae:
0.2188 - lr: 6.2500e-06
Epoch 82/100
645/645 [================] - 57s 89ms/step - loss: 0.6235 -
emotion output loss: 0.5141 - stress output loss: 0.1094 - emotion output accuracy: 0.8138 -
stress_output_mae: 0.2188 - val_loss: 1.1606 - val_emotion_output_loss: 1.0512 -
val_stress_output_loss: 0.1094 - val_emotion_output_accuracy: 0.6367 - val_stress_output_mae:
0.2188 - lr: 6.2500e-06
Epoch 83/100
```

emotion\_output\_loss: 0.5150 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8128 -

stress output mae: 0.2188 - val loss: 1.1651 - val emotion output loss: 1.0558 val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6356 - val\_stress\_output\_mae: 0.2187 - lr: 6.2500e-06 Epoch 84/100 645/645 [===============================] - 57s 88ms/step - loss: 0.6200 emotion\_output\_loss: 0.5106 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8137 stress\_output\_mae: 0.2187 - val\_loss: 1.1586 - val\_emotion\_output\_loss: 1.0492 val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6369 - val\_stress\_output\_mae: 0.2188 - lr: 6.2500e-06 Epoch 85/100 0.5118 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8149 - stress\_output\_mae: 0.2188Restoring model weights from the end of the best epoch: 75. Epoch 85: ReduceLROnPlateau reducing learning rate to 3.12499992105586e-06. 645/645 [============ - 57s 88ms/step - loss: 0.6211 emotion\_output\_loss: 0.5118 - stress\_output\_loss: 0.1094 - emotion\_output\_accuracy: 0.8149 stress output mae: 0.2188 - val loss: 1.1520 - val emotion output loss: 1.0426 val\_stress\_output\_loss: 0.1094 - val\_emotion\_output\_accuracy: 0.6403 - val\_stress\_output\_mae: 0.2188 - lr: 6.2500e-06 Epoch 85: early stopping 112/112 [===================] - 5s 45ms/step - loss: 1.1420 emotion output loss: 1.0326 - stress output loss: 0.1094 - emotion output accuracy: 0.6278 stress\_output\_mae: 0.2187 Total Loss: 1.1420 Loss (Emotion): 1.0326 Loss (Stress): 0.1094 Validation Accuracy (Emotion): 62.78%

anger 0.55 0.55 0.55 958 contempt 0.83 0.91 0.87 11

precision recall f1-score support

113/113 [=======] - 5s 44ms/step

Validation MAE (Stress): 0.2187

 disgust
 0.73
 0.65
 0.69
 111

 fear
 0.48
 0.38
 0.43
 1024

 happy
 0.83
 0.87
 0.85
 1774

 neutral
 0.58
 0.61
 0.60
 1233

 sad
 0.51
 0.53
 0.52
 1247

 surprise
 0.76
 0.76
 0.76
 831

accuracy 0.64 7189

macro avg 0.66 0.66 0.66 7189

weighted avg 0.63 0.64 0.64 7189