

Model: "sequential"

Layer (type)	Output Shape	Param #
conv2d (Conv2D)	(None, 64, 128, 32)	320
batch_normalization (BatchNormalization)	(None, 64, 128, 32)	128
max_pooling2d (MaxPooling2D)	(None, 32, 64, 32)	0
conv2d_1 (Conv2D)	(None, 32, 64, 64)	18,496
batch_normalization_1 (BatchNormalization)	(None, 32, 64, 64)	256
max_pooling2d_1 (MaxPooling2D)	(None, 16, 32, 64)	0
conv2d_2 (Conv2D)	(None, 16, 32, 128)	73,856
batch_normalization_2 (BatchNormalization)	(None, 16, 32, 128)	512
max_pooling2d_2 (MaxPooling2D)	(None, 8, 16, 128)	0
conv2d_3 (Conv2D)	(None, 8, 16, 256)	295,168
batch_normalization_3 (BatchNormalization)	(None, 8, 16, 256)	1,024
max_pooling2d_3 (MaxPooling2D)	(None, 4, 8, 256)	0
flatten (Flatten)	(None, 8192)	0

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Total params: 4,587,654 (17.50 MB)
Trainable params: 4,586,694 (17.50 MB)
Non-trainable params: 960 (3.75 KB)
Epoch 1/30
373/373 ----- 64s 166ms/step - accuracy: 0.3130 - loss: 2.8739 - val_accuracy: 0.4224 - val_loss: 1.3945
Epoch 2/30
373/373 ----- 81s 164ms/step - accuracy: 0.4512 - loss: 1.3742 - val_accuracy: 0.4265 - val_loss: 1.3550
Epoch 3/30
373/373 ----- 63s 170ms/step - accuracy: 0.4748 - loss: 1.3289 - val_accuracy: 0.4614 - val_loss: 1.3093
Epoch 4/30
373/373 ----- 62s 165ms/step - accuracy: 0.5250 - loss: 1.2244 - val_accuracy: 0.4459 - val_loss: 1.4881
Epoch 5/30
373/373 ----- 62s 166ms/step - accuracy: 0.5536 - loss: 1.1577 - val_accuracy: 0.4083 - val_loss: 1.6160
Epoch 6/30
373/373 ----- 62s 165ms/step - accuracy: 0.5808 - loss: 1.0848 - val_accuracy: 0.4708 - val_loss: 1.4288
Epoch 7/30
373/373 ----- 61s 164ms/step - accuracy: 0.6038 - loss: 1.0106 - val_accuracy: 0.4600 - val_loss: 1.4930
Epoch 8/30
373/373 ----- 61s 164ms/step - accuracy: 0.6559 - loss: 0.9030 - val_accuracy: 0.5131 - val_loss: 1.4721
Epoch 9/30
373/373 ----- 61s 164ms/step - accuracy: 0.7053 - loss: 0.8144 - val_accuracy: 0.4936 - val_loss: 1.2680
Epoch 10/30
373/373 ----- 62s 165ms/step - accuracy: 0.7625 - loss: 0.6458 - val_accuracy: 0.4788 - val_loss: 1.7044
Epoch 11/30
373/373 ----- 61s 164ms/step - accuracy: 0.8081 - loss: 0.5531 - val_accuracy: 0.5910 - val_loss: 1.3218
Epoch 12/30
373/373 ----- 61s 164ms/step - accuracy: 0.8612 - loss: 0.3843 - val_accuracy: 0.5413 - val_loss: 1.6330
Epoch 13/30
373/373 ----- 61s 164ms/step - accuracy: 0.8319 - loss: 0.4669 - val_accuracy: 0.4359 - val_loss: 2.7977
Epoch 14/30
373/373 ----- 61s 164ms/step - accuracy: 0.9278 - loss: 0.2226 - val_accuracy: 0.5386 - val_loss: 1.9101
Epoch 15/30
373/373 ----- 82s 164ms/step - accuracy: 0.8924 - loss: 0.2803 - val_accuracy: 0.5547 - val_loss: 1.7837
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Epoch 25/30
373/373 ----- 61s 164ms/step - accuracy: 0.9858 - loss: 0.0421 - val_accuracy: 0.5447 - val_loss: 2.4921
Epoch 26/30
373/373 ----- 61s 164ms/step - accuracy: 0.9649 - loss: 0.0932 - val_accuracy: 0.4755 - val_loss: 3.0766
Epoch 27/30
373/373 ----- 82s 164ms/step - accuracy: 0.9055 - loss: 0.3022 - val_accuracy: 0.5480 - val_loss: 2.1013
Epoch 28/30
373/373 ----- 61s 165ms/step - accuracy: 0.9683 - loss: 0.0861 - val_accuracy: 0.5594 - val_loss: 2.4124
Epoch 29/30
373/373 ----- 61s 164ms/step - accuracy: 0.9876 - loss: 0.0366 - val_accuracy: 0.5400 - val_loss: 3.2904
Epoch 30/30
373/373 ----- 82s 165ms/step - accuracy: 0.9931 - loss: 0.0267 - val_accuracy: 0.5400 - val_loss: 2.7861
47/47 ----- 3s 72ms/step - accuracy: 0.5431 - loss: 2.6986
Test Loss: 2.7861, Test Accuracy: 0.5400
47/47 ----- 4s 74ms/step
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Classification Report:

	precision	recall	f1-score	support
disgust	0.55	0.50	0.53	254
happy	0.65	0.34	0.45	255
sad	0.44	0.71	0.54	254
fear	0.44	0.50	0.47	254
angry	0.70	0.68	0.69	254
neutral	0.62	0.50	0.55	218
accuracy			0.54	1489
macro avg	0.57	0.54	0.54	1489
weighted avg	0.57	0.54	0.54	1489

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ubuntu@ip-10-1-3-207:~/DL_Project$
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