

Project Development Phase Model Performance Test

Date	19 November 2022
Team ID	PNT2022TMID29700
Project Name	Project – Real Time Communication Powered by AI for Specially Abled
Maximum Marks	10 Marks

Model Performance Testing:

S. N o.	Parameter	Values	Screenshot
	Model Summary	Total params: 1,103,721 Trainable params: 1,103,721 Non-trainable params: 0	<p>*MODEL BUILDING*</p> <pre> In [22]: from keras.models import Sequential from keras.layers import Dense from keras.layers import Convolution2D from tensorflow.keras.layers import Conv2D, MaxPooling2D from keras.layers import Dropout from keras.layers import Flatten In [23]: #Creating the model model=Sequential() #Adding the Layers model.add(Convolution2D(32,(3,3), input_shape=(64,64,1), activation = 'relu')) model.add(MaxPooling2D(pool_size=(2,2))) model.add(Flatten()) #Adding hidden layers model.add(Dense(400, activation='relu')) model.add(Dense(200, activation='relu')) model.add(Dense(100, activation='relu')) #Adding the output layer model.add(Dense(9, activation='softmax')) </pre>

	Accuracy	Training Accuracy - 0.9858 Validation Accuracy -0.9860	<div><div></div><div><pre>/tmp/.vsuser/.ipykernel_165/43645558.py:1: UserWarning: 'Model.fit_generator' is deprecated and will be removed in a future version. Please use 'Model.fit', which supports generators. model.fit_generator(x_train, steps_per_epoch=30, epochs=10, validation_data=x_test, validation_steps=50) Epoch 1/10 30/30 [=====] - ETA: 0s - loss: 1.0350 - accuracy: 0.6200WARNING:tensorflow:Your input ran out of data; interrupting training. Make sure that your dataset or generator can generate at least `steps_per_epoch * epochs` batches (in this case, 50 batches). You may need to use the repeat() function when building your dataset. 30/30 [=====] - 10s 314ms/step - loss: 1.0350 - accuracy: 0.6200 - val_loss: 0.3868 - val_accuracy: 0.8618 Epoch 2/10 30/30 [=====] - 0s 254ms/step - loss: 0.2899 - accuracy: 0.9133 Epoch 3/10 30/30 [=====] - 0s 259ms/step - loss: 0.1431 - accuracy: 0.9610 Epoch 4/10 30/30 [=====] - 7s 244ms/step - loss: 0.1022 - accuracy: 0.9717 Epoch 5/10 30/30 [=====] - 7s 230ms/step - loss: 0.0756 - accuracy: 0.9757 Epoch 6/10 30/30 [=====] - 7s 247ms/step - loss: 0.0636 - accuracy: 0.9830 Epoch 7/10 30/30 [=====] - 7s 241ms/step - loss: 0.0433 - accuracy: 0.9860 Epoch 8/10 30/30 [=====] - 0s 252ms/step - loss: 0.0517 - accuracy: 0.9847 Epoch 9/10 30/30 [=====] - 0s 250ms/step - loss: 0.0287 - accuracy: 0.9917 Epoch 10/10 30/30 [=====] - 0s 253ms/step - loss: 0.0245 - accuracy: 0.9943 Out[25]: <keras.callbacks.History at 0x7f6edf060550></pre></div></div>
	Confidence Score (Only Yolo Projects)	Class Detected – N/A Confidence Score – N/A	N/A