

Real –Time Communication System Powered by AI for Specially Abled
Team ID : PNT2022TMID14463

```
from keras.preprocessing.image import ImageDataGenerator
train_datagen=ImageDataGenerator(rescale=1./255,shear_range=0.2,zoom_range=0.2,horizontal_flip=True)
test_datagen=ImageDataGenerator(rescale=1./255)

x_train =
train_datagen.flow_from_directory('/content/Dataset/training_set',target_size=(64,64),batch_size=300,class_mode='categorical',color_mode="grayscale")
Found 15750 images belonging to 9 classes.

x_test =
test_datagen.flow_from_directory('/content/Dataset/test_set',target_size=(64,64),batch_size=300,class_mode='categorical',color_mode="grayscale")
Found 2250 images belonging to 9 classes.

from keras.models import Sequential
from keras.layers import Dense
from keras.layers import Convolution2D
from keras.layers import MaxPooling2D
from keras.layers import Dropout
from keras.layers import Flatten

model = Sequential()

model.add(Convolution2D(32,(3,3),input_shape=(64,64,1), activation='relu'))
#no. of feature detectors, size of feature detector, image size, activation function

model.add(MaxPooling2D(pool_size=(2,2)))

model.add(Flatten())
```