EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRE

MODELBUILDING

IMPORTINGTHEMODELBUILDING LIBRARIES

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ProjectName	Project-Emerging Methods for Early detection of forest fire

IMPORTINGTHEMODELBUILDINGLIBRARIES:

Import the libraries that are required to initialize the neural network layer, create and adddifferentlayers to the neural network model. The below libraries are imported and executed.

11/7/22, 12:35 AM

Untitled8.ipynb - Colaboratory

Importing Keras libraries

import keras

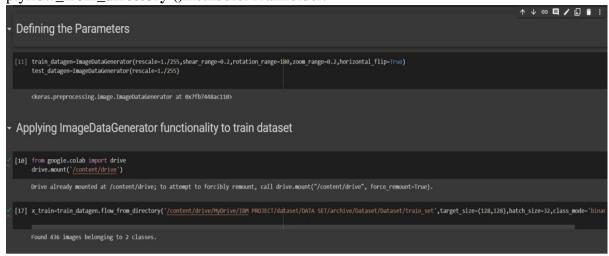
Importing ImageDataGenerator from Keras

from keras.preprocessing.image import ImageDataGenerator

- In	porting Keras libraries
[1]	import keras
• In	nporting ImageDataGenerator from Keras
½ [13]	from matplotlib import pyplot as plt from keras.preprocessing.image import ImageDataGenerator
→ Defining the Parameters	
0	train_datagen=ImageDataGenerator(rescale=1./255,shear_range=0.2,rotation_range=180,zoom_range=0.2,horizontal_flip=True) test_datagen=ImageDataGenerator(rescale=1./255)
C+	<pre><keras.preprocessing.image.imagedatagenerator 0x7fb7448ac110="" at=""></keras.preprocessing.image.imagedatagenerator></pre>

APPLYINGImageDataGeneratortotraindataset:

plyflow_from_directory ()methodforTrainfolder.



APPLYINGImageDataGeneratortotestdataset:

 $Applying the {\bf flow_from_directory} () method for test folder.$



IMPORTINGMODELBUILDINGLIBRARIES:

11/8/22, 1:16 AM

Main code - Colaboratory

Importing Model Building Libraries

```
#to define the linear Initialisation import sequential
from keras.models import Sequential
#to add layers import Dense
from keras.layers import Dense
#to create Convolutional kernel import convolution2D
from keras.layers import Convolution2D
#import Maxpooling layer
from keras.layers import MaxPooling2D
#import flatten layer
from keras.layers import Flatten
import warnings
warnings.filterwarnings('ignore')
```