

EARLY DETECTION OF FOREST FIRE USING DEEP LEARNING MODEL BUILDING

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Project Name	Project-Early detection of forest fire using deep learning

Import the Model Building Libraries

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1.Importing the model bulding Libraries

[1] import keras
    from keras.preprocessing.image import ImageDataGenerator

[2] #Define the parameters/arguments for ImageDataGenerator class
    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)

[6] from google.colab import drive
    drive.mount('/content/drive')

Mounted at /content/drive

[7] cd /content/drive/MyDrive/ibm
    /content/drive/MyDrive/ibm

[8] x = train_datagen.flow_from_directory(r"/content/drive/MyDrive/ibm/fire/dataset/train_set", target_size=(256, 256), class_mode='categorical', batch_size=32)
    Found 16 images belonging to 2 classes.

[9] y = test_datagen.flow_from_directory(r"/content/drive/MyDrive/ibm/fire/dataset/test_set", target_size=(256, 256), class_mode='categorical', batch_size=32)
    Found 19 images belonging to 2 classes.

#import model building libraries
#to define linear initialisation import Sequential
from keras.models import Sequential
#to add layers import Dense
from keras.layers import Dense
#to create convolution 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')
```