EMERGING METHODS FOR EARLY DETECTION OF FOREST FIRES

Milestone : Model Building

Activity : Adding CNN Layer

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Project Name	Emerging methods for early detection of forest fires

Importing the image data generator library :

```
import tensorflow as tf

from tensorflow.keras.preprocessing.image import ImageDataGenerator
```

Define the parameters / arguments for image data generator class :

```
trainDatagenerator = ImageDataGenerator(rescale=1./255, shear_range=0.2, zoom_range=0.2, horizontal_flip=True)

testDatagenerator = ImageDataGenerator(rescale=1./255)
```

Configure the learning process:

```
model.compile(loss='binary_crossentropy',optimizer="adam",metrics=["accuracy"])
```

Adding CNN Layer :

add convolutional layer :

```
model.add(Convolution2D(32,(3,3),input_shape=(128,128,3),activation='relu'))
```

add maxpooling layer :

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

add flatten layer :

```
model.add(Flatten())
```