MODEL BUILDING

PREDICTIONS

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Project Name	Emerging Methods for Early Detection of Forest Fires

Predictions:

```python
#import load_model from keras.model
from keras.models import load_model
#import image class from keras from
tensorflow.keras.preprocessing import image #import numpy
import numpy as np
#import cv2
import cv2

#load the saved model model =
load_model("forest1.h5")

img=image.load_img(r'/content/drive/MyDrive/Dataset/test_set/forest/
0.48007200_1530881924_final_forest.jpg')
x=image.img_to_array(img)
res = cv2.resize(x, dsize=(128, 128), interpolation=cv2.INTER_CUBIC)
#expand the image shape

x=np.expand_dims(res,axis=0)

pred= model.predict(x)
```

1/1 [==============================] - 0s 149ms/step

pred

array([[0.5]], dtype=float32)

- A prediction is a guess about what might happen in the future, based on observations that you make.
- ⬚ Predicting is closely related to other process skills such as observing, inferring, and classifying.
- Prediction of forest fire id expected to reduce the impact of forest fire in the future.
- Many fire detection algorithms are available with different approach towards the detection of fire.
- In the existing work processes the fire affected region is predicted based on the satellite images.