

VIDEO ANALYSIS

OPEN CV FOR VIDEO PROCESSING

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```
[ ] pip install twilio
```

```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Collecting twilio
  Downloading twilio-7.15.2-py2.py3-none-any.whl (1.4 MB)
    1.4 MB 5.2 MB/s
Requirement already satisfied: pytz in /usr/local/lib/python3.7/dist-packages (from twilio) (2021.6)
Collecting PyJWT<3.0.0,>=2.0.0
  Downloading PyJWT-2.6.0-py3-none-any.whl (28 kB)
Requirement already satisfied: requests>=2.0.0 in /usr/local/lib/python3.7/dist-packages (from twilio) (2.25.0)
Requirement already satisfied: idna<3,>=2.5 in /usr/local/lib/python3.7/dist-packages (from requests>=2.0.0->twilio) (2.10)
Requirement already satisfied: charset<4,>=3.8.2 in /usr/local/lib/python3.7/dist-packages (from requests>=2.0.0->twilio) (3.0.4)
Requirement already satisfied: urllib3<1.25.0,>=1.25.1,<1.26,>=1.21.1 in /usr/local/lib/python3.7/dist-packages (from requests>=2.0.0->twilio) (1.24.3)
Requirement already satisfied: certifi<2017.4.17 in /usr/local/lib/python3.7/dist-packages (from requests>=2.0.0->twilio) (2022.9.14)
Installing collected packages: PyJWT, twilio
Successfully installed PyJWT-2.6.0 twilio-7.15.2
```

```
[ ] pip install playsound
```

```
Looking in indexes: https://pypi.org/simple, https://us-python.pkg.dev/colab-wheels/public/simple/
Collecting playsound
  Downloading playsound-1.3.0.tar.gz (7.7 kB)
Building wheels for collected packages: playsound
  Building wheel for playsound (setup.py) ... done
  Created wheel for playsound: filename=playsound-1.3.0-py3-none-any.whl size=7035 sha256=1174df1785342980c9f5b564a515a849acd7b795c04ec87a88c895604f8aada8
  Stored in directory: /root/.cache/pip/wheels/ba/f8/bb/ee57c8146b6543ca3a8ada4109b04cb5f9dfcb7b7e72b65ba2
Successfully built playsound
Installing collected packages: playsound
Successfully installed playsound-1.3.0
```

```
[ ] #import opencv library
import cv2
#import numpy
import numpy as np
#import image function from keras
from keras.preprocessing import image
#import load_model from keras
from keras.models import load_model
#import client from twilio API
from twilio.rest import Client
#import playsound package
from playsound import playsound
```

WARNING:playsound:playsound is relying on another python subprocess. Please use "pip install pygobject" if you want playsound to run more efficiently.

```
[ ] #load the saved model
model = load_model(r'./content/forest1.h5')
#define video
video = cv2.VideoCapture('./content/No fire video testing.mp4')
#define the features
name = ['forest', 'with forest']
```

```
[ ] account_sid = 'AC2d94ca0806ff25324a64047ba9cbb34'
    auth_token = '015f0873852a30c1fffe52fad572d250'
    client = Client(account_sid, auth_token)

    message = client.messages \
        .create(
            body="Forest fire is detected , stay alert",
            from_="+13148485411",
            to="+919580209150"
        )

    print(message.sid)
    print('Fire Detected')
    print('SMS sent!')
```

```
5ne5c22857e595ead1ebbae53dda624868
Fire Detected
SMS sent!
```

OUTCOMES

