

Get started

Visit <https://cloud.ibm.com> and create an account

create a resource and choose **Visual RecognitionMarkup** in the **AI** category

use Lite Plan and copy your given API key and your URL

install Python Version 3

install these packages with pip: `opencv-python/ ibm-watson`

Face Recognition code

```
import cv2
from ibm_watson import VisualRecognitionV3
from ibm_cloud_sdk_core.authenticators import IAMAuthenticator
import json
import sys

authenticator = IAMAuthenticator('YOUR API KEY')
service = VisualRecognitionV3(
    version='2020-02-26',
    authenticator=authenticator
)
service.set_service_url('YOUR URL')

cap = cv2.VideoCapture(0)

key = ''
while( key != 'q' ):
    ret, frame = cap.read()
    cv2.imshow('frame', frame)
    intkey = cv2.waitKey(2)
    if( intkey > 0 ):
        key = chr(intkey)
    else:
        key = ''

    if key == 'd' :
        cv2.imwrite('upload.jpg', frame)
        with open('upload.jpg','rb') as file:
            classes = service.classify(images_file=file,threshold='0.6').get_result()
            print(json.dumps(classes, indent=2))
```

IBM Watson in Java

```
IamOptions iamoptions = new
IamOptions.Builder().apiKey("YOUR API
KEY").build();

    SpeechToText stt = new SpeechToText-
    (iamoptions);
        stt.setEndPoint("https://stream-fra.w-
atsonplatform.net/speech-to-text/api");
        File audio = new File("src/resour-
ces/sample1.wav");
        RecognizeOptions options = new Recogn-
izeOptions.Builder()
            .audio(audio)
            .contentType(HttpMediaType.A-
UDIO_WAV)
            .build();
        SpeechRecognitionResults transcript =
stt.recognize(options).execute();
        System.out.println(transcript);
        taText.setText(transcript.getResults-
().get(0).getAlternatives().get(0).getTranscr-
ipt());
```

Speech to Text in Python

```
$ pip install --upgrade watson-developer-cloud
from speech_sentiment_python.recorder import
Recorder
recorder = Recorder("speech.wav")
recorder.record_to_file()
def transcribe_audio(path_to_audio_file):
    username = os.environ.get("USERNAME")
    password = os.environ.get("PASSWORD")
    speech_to_text = SpeechToText(username=us-
ername,
    password=password)
    with open(join(dirname(__file__), path_to_audi-
o_file), 'rb') as
    audio_file:
        return speech_to_text.recognize(audio_file,
            content_t-
ype='audio/wav')
```