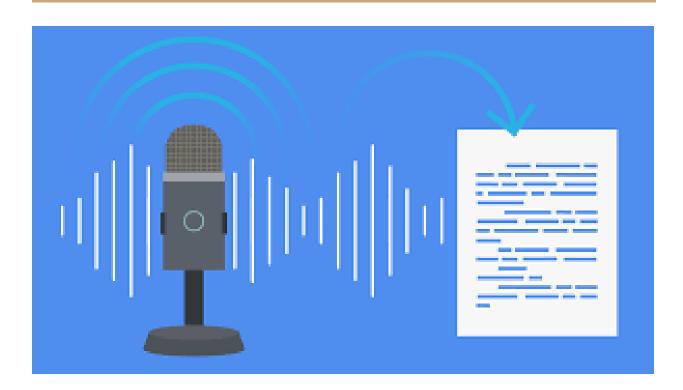
## Isha Singhal

# Speech to Text



### **Step 1: downloading the Python packages**

```
Looking in indexes: <a href="https://pypi.org/simple">https://us-python.pkg.dev/colab-wheels/public/simple/Requirement already satisfied: speechrecognition in /usr/local/lib/python3.7/dist-packages (3.8.1)</a>
```

SpeechRecognition is the package that handles the conversion of speech to text.

#### **Step 2: importing library**

```
[16] #import library
import speech_recognition as sr
```

## Step 3: use Google's speech recognition technology

```
#Initialize recognizer class (for recognizing the speech)
r = sr.Recognizer()
```

#### Step 4: convert the audio file

Since mp3 format is not supported, but wav is, I used an online website to convert the audio. https://cloudconvert.com/mp3-to-wav

#### Step 5: listening to the audio file

```
# Reading Audio file as source
#listening the audio file and store in audio_text variable
with sr.AudioFile('AI_Assignment.wav') as source:
    audio_text = r.listen(source)
```

#### Step 6: exception handling

```
try:
    # using google speech recognition
    text = r.recognize_google(audio_text)
    print('Converting audio transcripts into text')
    print(text)
except:
    print('Please run again.')
```

recognize() method will throw an error if the API can't be reached

#### Step 7: output

```
Converting audio transcripts into text hi I have a flight at 7 a.m. from Delhi to Mumbai
```

#### Step 8: fetching the relevant entries using substring

```
print("Time:", text[22:28])
print("Departure Location:", text[34:39])
print("Destination Location:", text[43:])

Time: 7 a.m.
Departure Location: Delhi
Destination Location: Mumbai
```