Raj Reddy Center for Technology and Society

Speech Sample Collection

Introduction

All machine learning (ML) algorithms require data. This data may take the form for numbers, text, audio, or videos dependent on the intended use case for the system. These datasets may be collected through various avenues such as web scrapping, usage/diagnostic data from existing applications, public surveys, controlled data acquisition sessions, etc.

The current data collection run aims to collect speech data for training an ML model to perform automated speech recognition. This involves recording of speech audio of known sentences in the language of interest (Telugu for the current study).

Procedure

The subjects for the data collection run, will need to access the following web page:

RCTS - Speech Recorder

Here, the students will be prompted to provide a consent for data collection at the start of every session, once the consent is given, they will be shown a sentence in Telugu which they will have to record and submit. Upon submission a new sentence will be shown, and the process is repeated for the duration of the data collection session.

Below is a step-by-step run through of the different screens and actions to be performed at each stage, please go through once completely before the data collection starts and refer to this document in case of any doubts related to the data collection process.

Please ensure the following before you start:

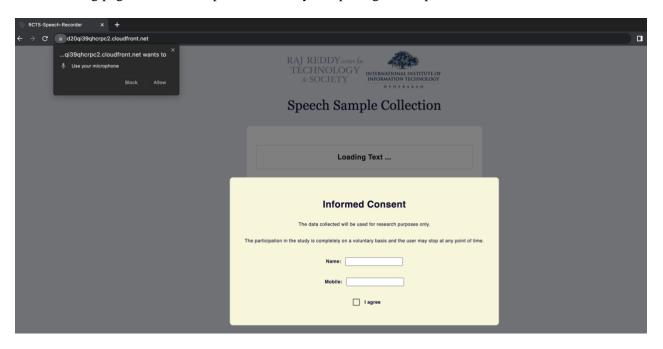
- 1. You are using a device that has access to a microphone such as a smart phone, tablet, or a laptop.
- 2. You are connected to the internet before you start your data collection session.
- 3. You are not in a very noisy environment.

Step -1:

Click the link shown above or copy paste the link below in your browser –

https://d20qi39qhcrpc2.cloudfront.net

The following page should load upon successfully completing this step.



Step -2:

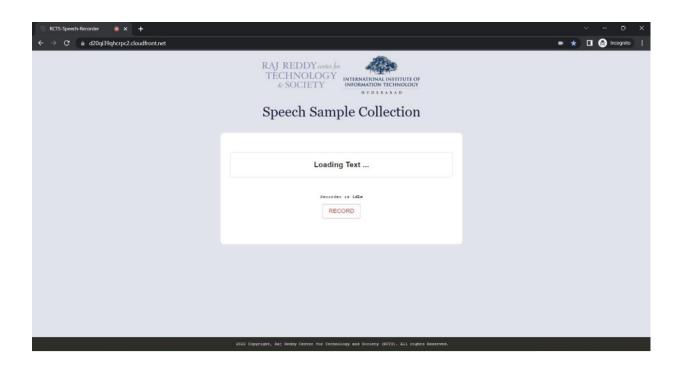
Now perform the following action on the screen shown above:

- 1. Allow the use of your microphone.
- 2. Read and Agree to the Informed Consent by entering your Name and Mobile information and checking the "I agree" box, to continue participating in the data collection session.

Upon successfully completing the above actions, the following page should load. You will be prompted to give consent only once per recording session.

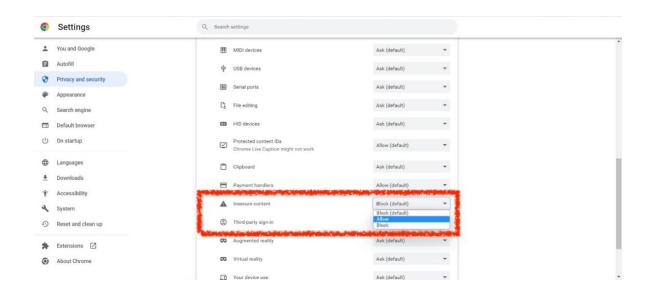


If you get a message saying – "Loading Text ..." as shown below, you will have to follow **Step – 3**, or else you can directly skip to **Step – 4**.



Step -3:

To correct the "Loading Text ..." issue, please allow "Insecure Content" to be displayed on your browser by going to Browser Settings \rightarrow Privacy and Security and in the drop down for Insecure Content dropdown choose Allow, as shown below.



You will typically have to do this step only once per device.

<u>Step - 4</u>: Press the "**RECORD**" button, this should change the message above the button from "*Recorder is idle*" to "*Recorder is recording*" as shown below.



Now read out the sentence shown on the screen in clear and audible voice. Click the "STOP" button upon reading the complete sentence. This should result in the following screen.



Step -5:

Now you can playback the recording to see if you want to check how it sounds and if unsatisfied, you can click the "**RECORD**" button to repeat **Step** -4.

Once satisfied please press the "UPLOAD" button to submit your recording.



You should receive an "Upload Successful!" message as shown above, to indicate a successful audio recording submission.

<u>Step − 6</u>:

You can click anywhere on the screen to close the "Upload Successful!" message and generate a new sentence to read.

Now you can repeat Steps 1 through 5 multiple times until the end of you allocated recording session to submit multiple audio recordings.

Step -7:

Close the browser window to end your recording session.

Thank you for participating in our speech sample collection.

*Note:

- One recording session starts from opening the given link in your browser to closing the browser window.
- You can take part in multiple recording sessions.
- You can submit as many recordings as time permits.