

# Subject: 21AIE315

Lab Session: 08

## Notes:

1. Please read the assignment notes carefully and comply to the guidelines provided.
2. Code should be checked into the GitHub and the report to TurnItIn. These details shall be provided in the Lab.
3. If you have not completed the prerequisite assignments, please complete them before starting these assignments.
4. Please use your headphone / earphones for lab experiments. Avoid using the device microphone / speakers (not to disturb others).

## References:

### Main Section (Mandatory):

***Please use the recorded voice of yours used in last lab session. If needed, record a few more speech signals.***

A1. Use LSTM, Bi-LSTM networks for speech recognition. Use STFT / STCT, MFCC & LPC coefficients.

A2. Speak the sentence “Bhanumathi weds Rajat” (భానుమతి వెడ్స్ రజత్ || భానుమతి వెడ్స్ రజత్).

Construct speech for the word “Bharat” (భారత్ || भारत || భారత్ || பாரத்) by combining segmented phonemes taken from “Bhanumathi weds Rajat” speech recording. Listen to this word speech generated and note down the issues associated with this approach of speech synthesis. The string written Indian scripts may have some error. Please validate before using.

### Report Assignment:

1. Update your last week's report by updating the introduction, literature review sections. Please conduct literature review with the downloaded papers. The Reference section should be added / updated with the list of papers used for literature review. Please make sure to align your introduction to your project scope.
2. Add the experiments conducted on your recorded speech in Methodology section. Write the results obtained in results analysis section.
3. Summarize the outcomes of your experiments in conclusion section.