

# CS6300: Speech Technology

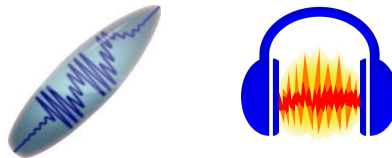
## Lab Assignment 1

Deadline: **Tuesday, Feb. 16, 11:59 p.m.**

---

### Tasks:

- 1) Install the "[wavesurfer](#)" or the "[Audacity](#)" application on your system.



- 2) Record the following sentences.

Note: We have given approximate syllable, and phoneme transcriptions below each sentence. **The spaces are ignored. Why?**

- a) *She had your dark suit in greasy wash water all year*  
(she) (had) (your) (dark) (suit) (in) (gri)(siy) (wash) (wa)(ter) (all) (year)  
/sh//i/h/a/d/y/ou/r/d/a/r/k/s/u/t/i/n/g/r/i/s/i/y/w/a/s/h/w/a/t/e/r/a/l/l/y/e/a/r/
- b) *don't ask me to carry an oily rag like that*  
(don't) (ask) (me) (to) (car)(riy) (an) (oi)(liy) (rag) (laik) (that)  
/d/o/n't/a/s/k/m/i/t/u/c/a/r/i/y/a/n/ao/i/l/i/y/r/a/g/l/ai/k/th/a/t/
- c) *this was easy for us*  
(this) (was) (ea)(siy) (for) (us)  
/th/i/s/w/a/s/i/s/i/y/f/a/r/a/s/
- d) *where were we you while we were away*  
(wher) (wer) (you) (vil) (we) (wer) (a)(way)  
/wh/e/r/w/e/r/u/v/i/l/w/i/w/e/r/a/w/e/y/
- e) *the museum hires musicians every evening*  
(the) (mu)(se)(um) (hai)(ers) (mu)(si)(ci)(ans) (ev)(ry) (ev)(ning)  
/th/a/m/u/s/i/a/m/h/ai/e/r/s/m/us/i/c/i/a/n/s/e/v/r/y/e/v/n/i/ng/

- f) *birthday parties have cupcakes and ice cream*  
 (berth)(day) (par)(ties) (hav) (cup)(keks) (and) (ais) (crim)  
 /b/e/r/th/d/e/y/p/a/r/t/i/s/h/a/v/c/a/p/k/e/k/s/a/nd/ai/s/cr/i/m/
- g) *bricks are an alternative*  
 (briks) (ar) (an) (al)(ter)(na)(tiv)  
 /br/i/k/s/a/r/a/n/a/l/t/er/n/a/t/i/v/
- h) *publicity and notoriety go hand in hand*  
 (pab)(li)(ci)(tiy) (and) (no)(to)(ri)(tiy) (go) (hand) (in) (hand)  
 /p/a/b/l/i/c/i/t/i/y/a/nd/n/o/t/o/r/i/t/i/y/g/o/h/a/nd/i/n/h/a/nd/
- i) *aluminum silverware can often be flimsy*  
 (a)(lu)(mi)(num) (sil)(ver)(wer) (can) (of)(ten) (be) (flim)(sy)  
 /a/l/u/m/i/n/a/m/s/i/l/v/e/r/w/e/r/c/a/n/o/f/t/e/n/b/i/f/l/i/m/s/i/y/
- j) *this is our singular goal*  
 (this) (is) (ao)(er) (sin)(gu)(lar) (gol)  
 /th/i/s/ao/e/r/s/i/ng/u/l/a/r/g/o/l/

#### **Steps to upload the recorded files:**

- I. Create a folder [here](#) and rename it to your “Roll Number”
- II. Inside this folder, create a sub-folder named “Assignment\_1”
- III. For each sentence, record two wave files.
- IV. Name the recorded wave files as follows

$s_{\{index\}}1.wav$ ,  $s_{\{index\}}2.wav$ ,

e.g., for sentence “g” you have to name the files as

$s_g1.wav$

$s_g2.wav$

- V. **Upload these files along with their label files** to the “Assignment\_1” folder **by Feb. 13, 11:59 p.m.**

- 3) Mark the boundaries of vowels /a/ /i/ /e/ /o/ /u/, syllables and words.
- 4) Compute the histograms of durations for each of the vowels, and all syllables, syllable rate.
- 5) Collect recorded wave files from at least 4 other batches. Compute the mean and standard deviation of durations for each of the syllables.