CS6300: Speech Technology
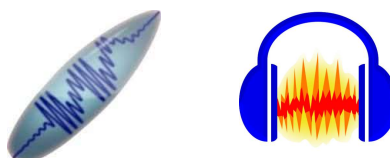
Lab Assignment 1

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/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.