

Name: _____

Section: _____

Homework 5 **Due February 19/20**

1. Indiana speech. Listen to hw5_1.wav and transcribe the sections in **bold only** using narrow transcription. The underlined part is not required, but served as a bonus.

He always took me out and had me swing the bat and

throw a baseball and everything.

When I was nine I started playing little league and ever since ... been

2. Formant extraction.

a. Download hw5_2.wav.

b. Extract F1 and F2 in the beginning and end of the vowels underlined below. I.e. you will have two sets of F1 and F2 values for each vowel.

c. Determine the F1 and F2 of each vowel by averaging the values over 5 consecutive time points.

e. In the excel sheet, you should have the F1 & F2 values at 5 time points and the average value for the beginning and ending of each vowel. Plot them using the scatter plot function in Excel (or some other graphing program you like). Remember to reverse the values on x and y axis's so that it resembles the vowel chart we usually see.

- f. Turn in the excel sheet with formant values and the plot (like the sample excel sheet),
or put the plot in another readable format, if you use a different graphing program.

H, I, double P, O, C, R, E, N, E...

vowel 1	Time_s	F1_Hz	F2_Hz
	0.796374	354.0668	1119.655
	0.802624	353.7035	1087.018
	0.808874	356.1062	1149.365
	0.815124	356.9091	1162.614
	0.821374	348.2849	1209.587
average		353.8141	1145.648
	0.902624	702.0804	1116.504
	0.908874	720.6296	1107.31
	0.915124	788.3685	1107.038
	0.921374	700.2626	1102.8
	0.927624	729.5723	1159.894
average		728.1827	1118.709

