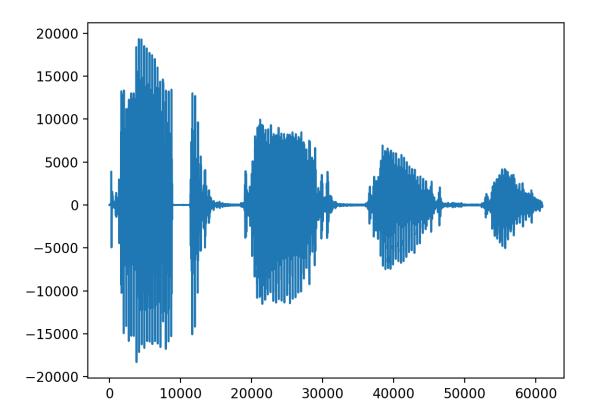
## BLG 354E Signals and Systems for CE (Spring 2018)

## Homework-4

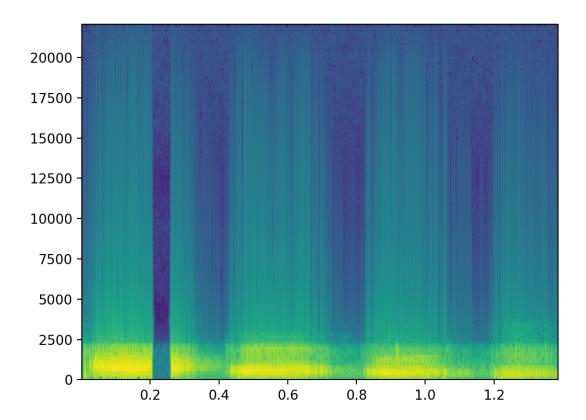
Onat Sahin - 150150129  $\text{June } 3,\,2018$ 

The code for the homework is in the 150150129.py file.

My input signal:



Spectogram of the filtered voice:



- f) When I tried different phase values, I have seen that multiples of  $\pi/2$  gives a very high pitched and low volume voice. This voice was the closest I got to zero output.
- g) When I make the phase 0 and set the carrier frequency of the demodulator 10Hz higher than the carrier frequency of the modulator, I can hear the sound but it becomes less clear and choppier(kesikli).