

Reprot

Go to src and launch : demo.py

Which generate 4 files : clean_speech.wav : original version of a clean speech signal

noisy_speech.wav : noisy version of the speech signal

denoising.wav : denoised version of the noisy speech that does not make use of Voice Activity Detection

VAD+denoising.wav : denoised version of the noisy using both Voice Activity Detection and Wiener filtering

Describe :src/speech.

Data.py #read and write ,split frames

Process.py #contains computation and denoising algo

Vad.py #VAD modues

Evaluate.py #computation between clean and recovered sig, computation of psoteriori SNR

Report.ipynb

Vad.ipynb

Techniques :

Wienner filtering

Noise Power Spectral

VAD-Voice Activty Detector

ref : Inspired from <https://github.com/LCAV/easy-dsp/blob/master/algorithms/vad.py>

Evaluation :

A psoteriori SNR