

- (1). Import various useful packages
- (2). Input speech ,fs=soundfile.read(inputAudio.wav)
- (3). Window=scipy.windows.hamming(fs,False)
- (4). function frameblocks(signal>window,o=0.5) create input speech into frames returns frames
- (5). For each frame:
 dftframe=numpy.fft.fft(frame)
 plot numpy.log10(abs(dftframe))
 lpccoeff=librosa(frame,order),returns order+1 length vector
 w,h=scipy.freqz(lpccoeff,1)
 plot(w,numpy.log10(abs(h))
 poles=1
 residual=signal.lfilter(coefficients,poles,frame) inverse filter
 synthetic=signal.lfilter([1],coefficients,residual)
 return all synthetic frames
- (6). functionaddframeblocks(signal>window,o=0.5) , returns the signal ,return output signal
- (7). soundFile.write(outputsignal,fs)
- (8). end