

Experiments

onview



In: Low Resolution Speech
with noise, reverberation,
clipping, etc.



Restoration using regression based model

Time Domain Model

STFT

Frequency Domain Model

iSTFT

Restoration using voicefixer

STFT

MelFB

Mel Restoration Module

Vocoder



Out: High Quality Speech



Regression based SSR *VS* Regression based GSR *VS* Fixed GSR

Regression

GSR

SSR

Voicewriter

GSR

board

vs

v *s*

board

Regression

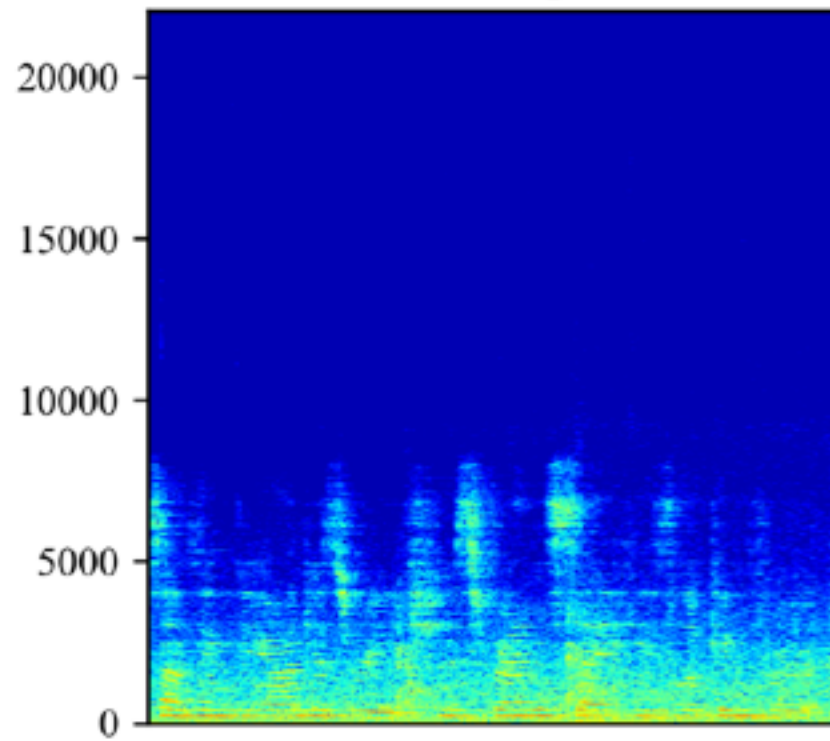
Generar

Restoration

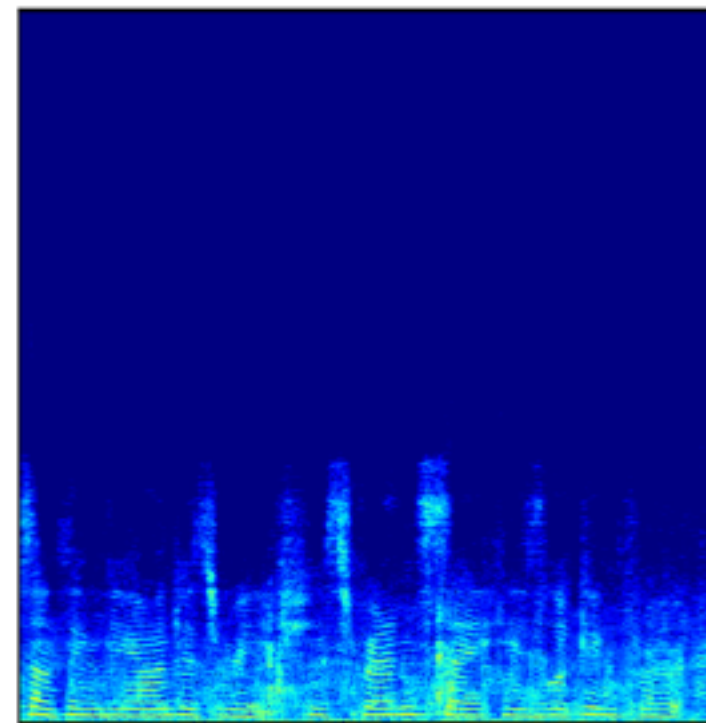
Speech

$$p_1=0.25,p_2=0.25,p_3=0.5,\theta_{low}=0.06,\theta_{high}=0.9,C_{low}=750,C_{high}=22050,O_{low}=2,O_{high}=10,S_{1low}=-5,S_{1high}=40,S_{2low}=0.3,S_{2high}=1.0.$$

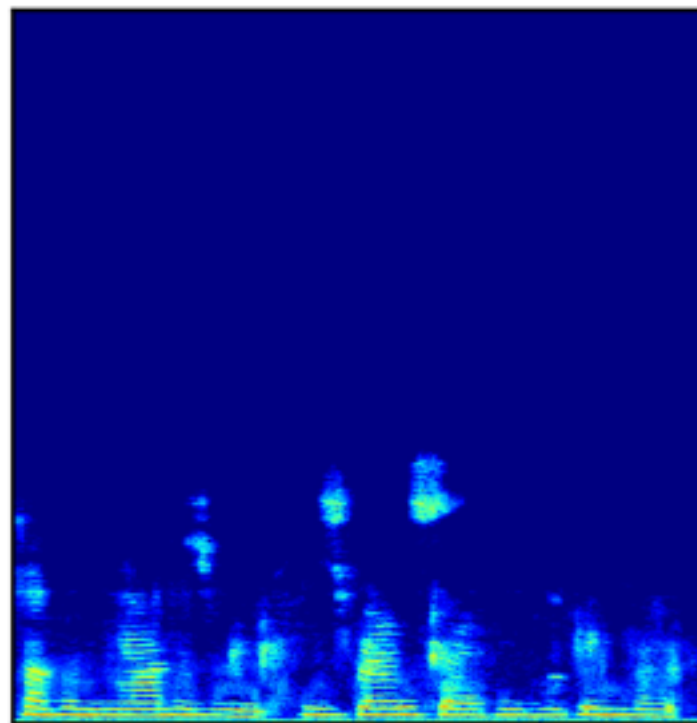
Distorted Speech



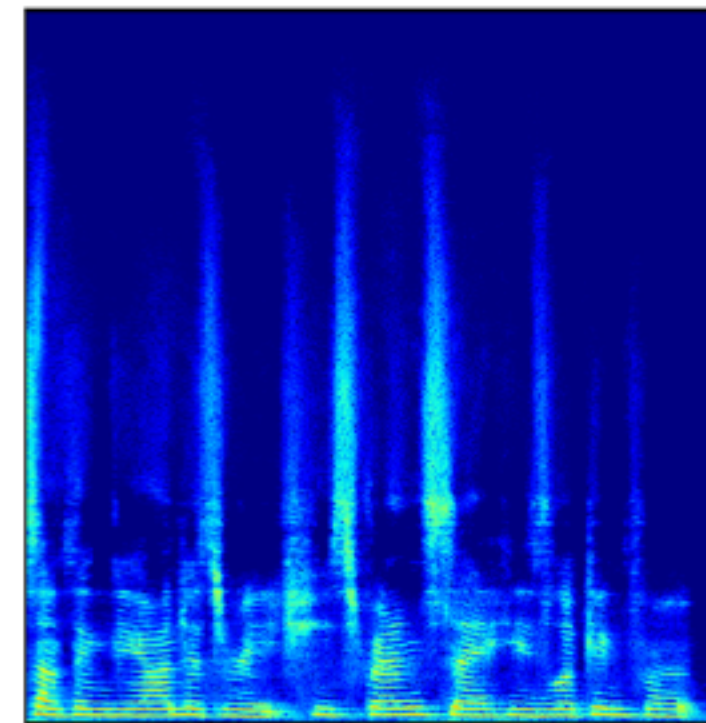
Dereverberation SSR Model Output



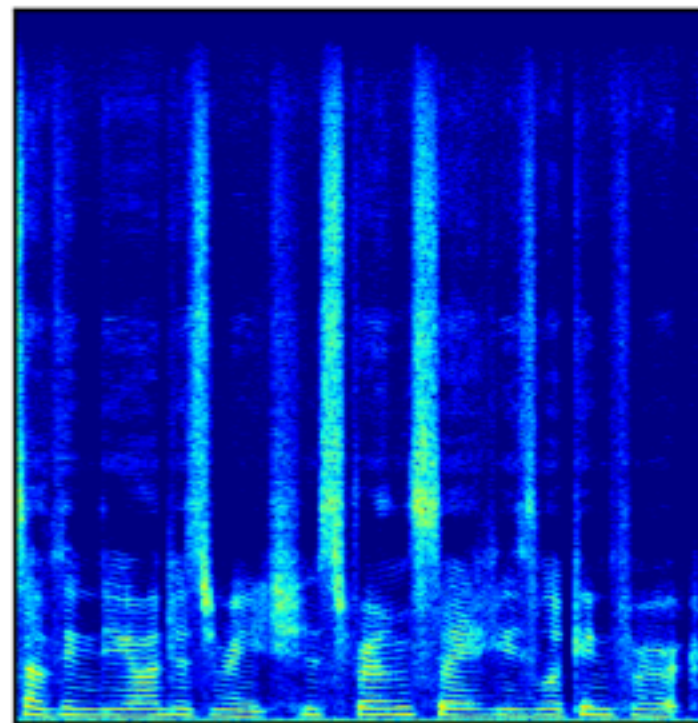
Enhancement SSR Model Output



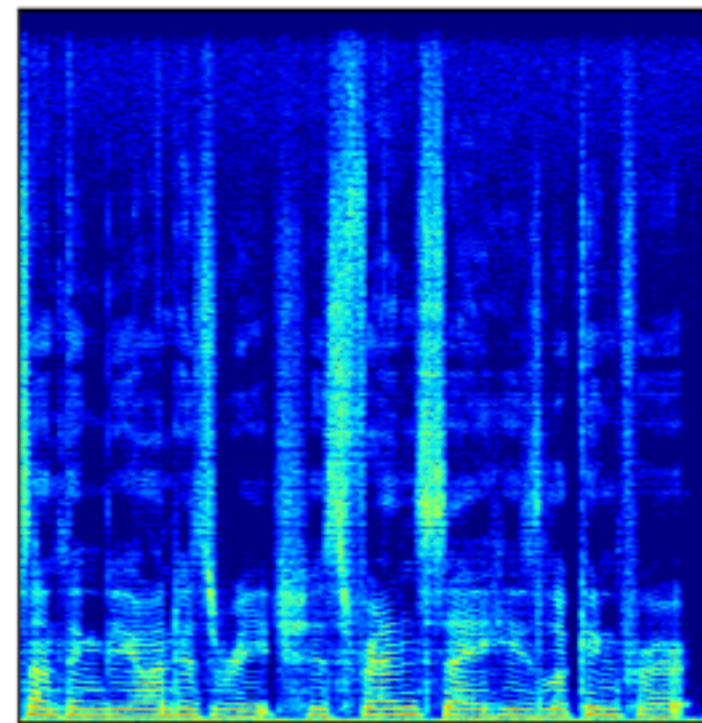
Regression based GSR Model Output



VoiceFixer GSR Model Output



Target



resistor

speech

dotween

Comparison

methnods

different