

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

board

Regression

vs

Voicemail

Fixer

vs

Regression

GSR

board

SSR

GSR

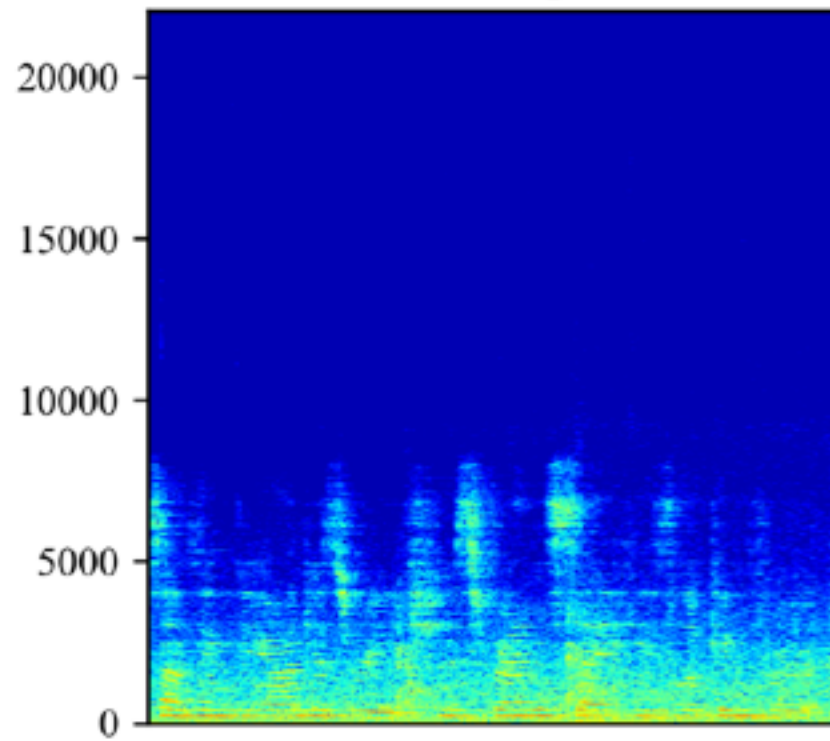
Generar

Speech

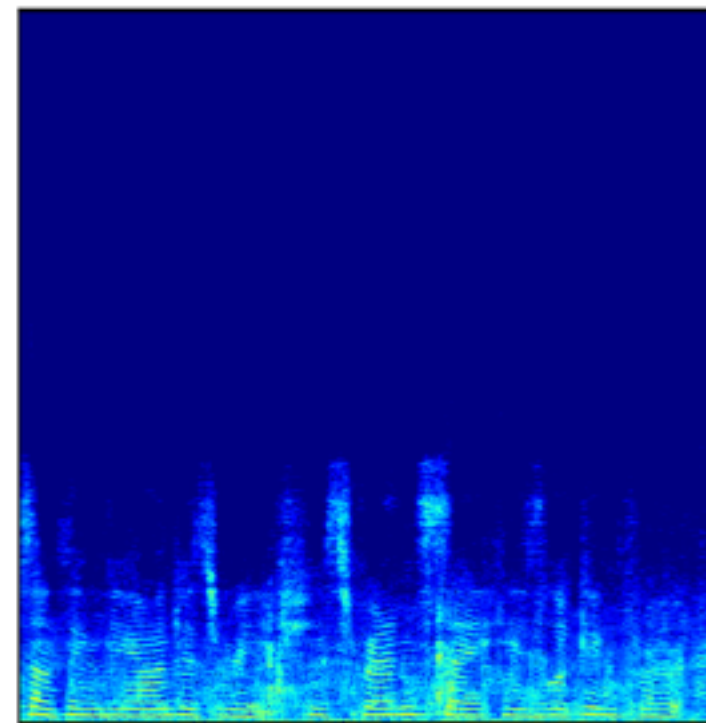
Restoration

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

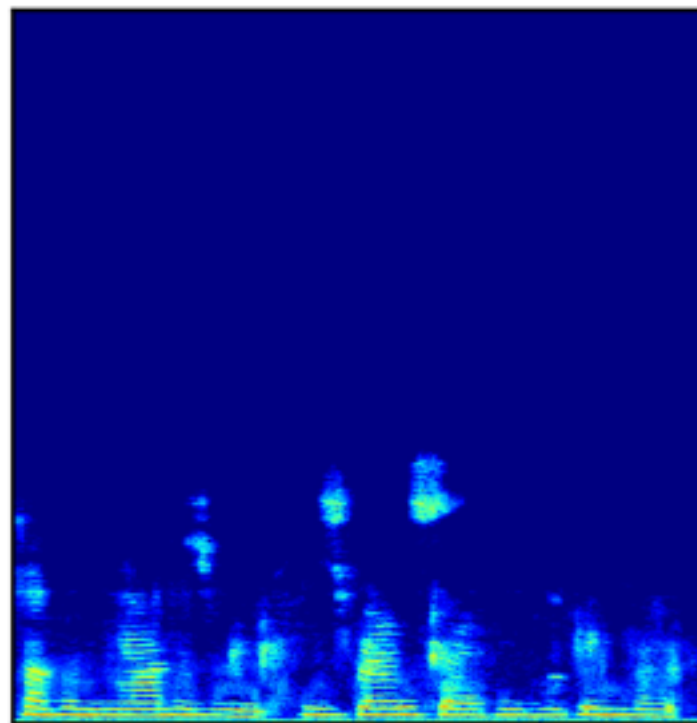
Distorted Speech



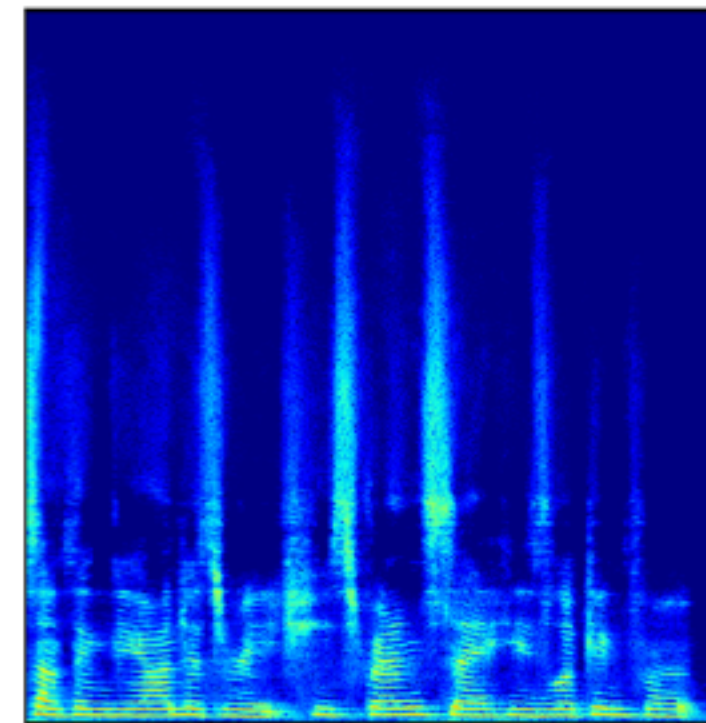
Dereverberation SSR Model Output



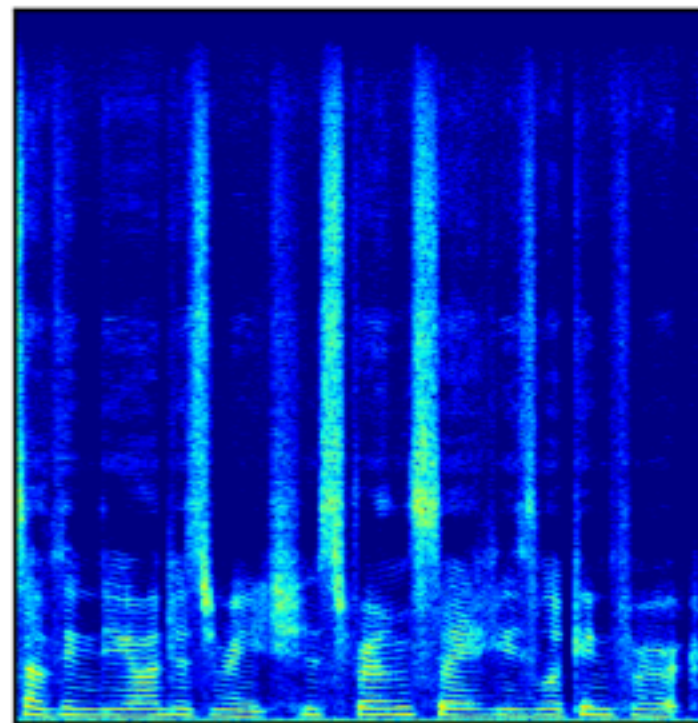
Enhancement SSR Model Output



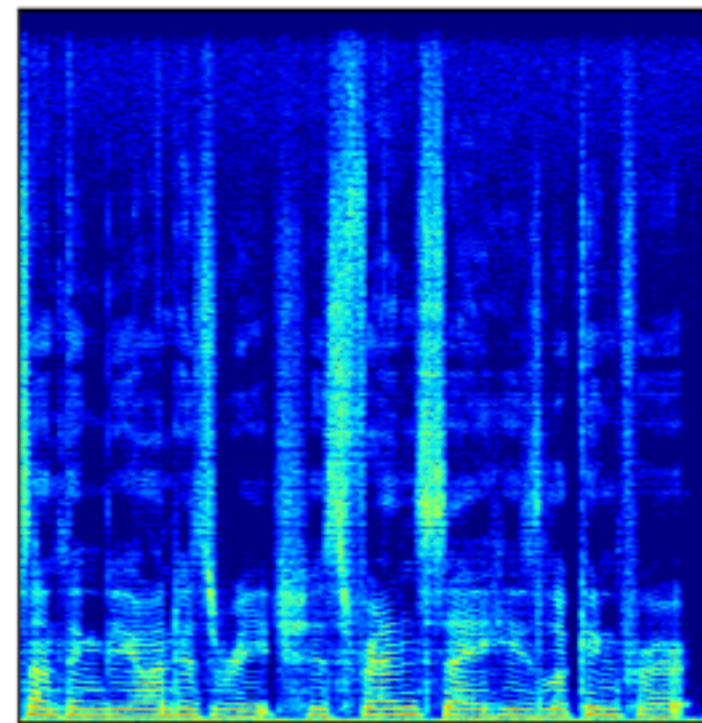
Regression based GSR Model Output



VoiceFixer GSR Model Output



Target



different

methnods

Comparison

dotween

resistor

speech