Voice Warping

We tried to warp the voice to emotions like anger, happiness, etc.
Analyze the voices:

- Angry Voice
- Happy Voice
- Sad Voice
- Disgusted Voice
- Feared Voice
- Robot Voice
- Kid Voice
- Ogre Voice
- Telephone Voice
- Cave Voice

Analysis of Voices
Here is the comparison of waveform and spectrograms of different presets:

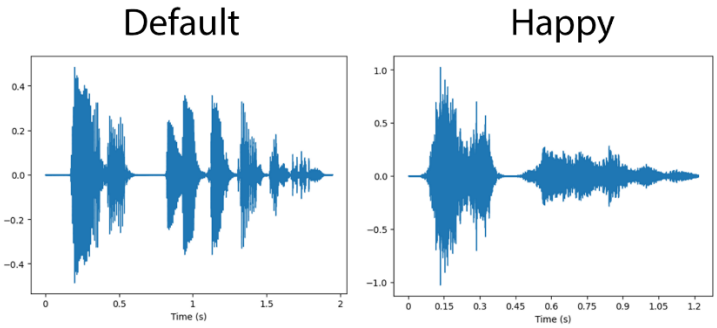


Image 2.1: Default and Happy Waveforms

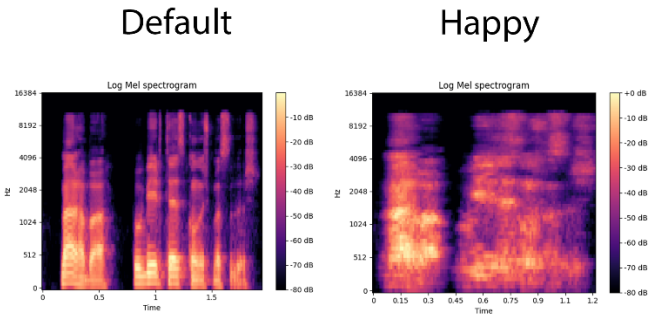
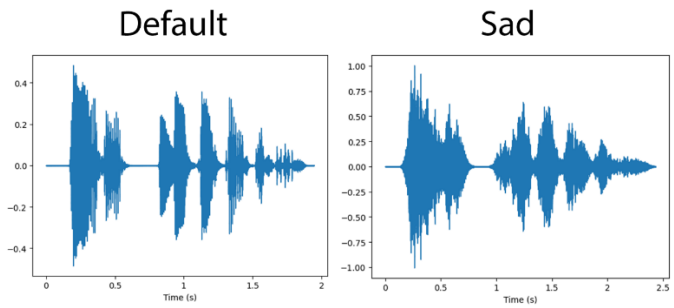
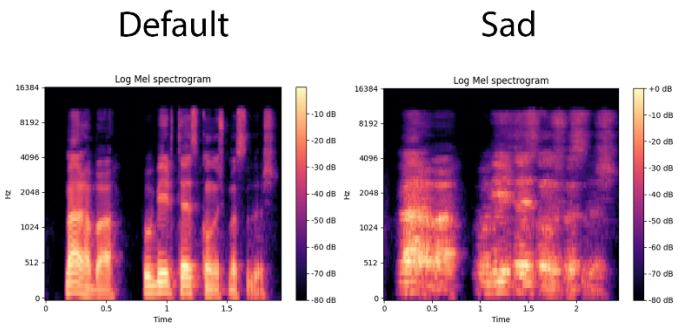


Image 2.2: Default and Happy Log Mel Spectrogram

In Image 2.2, the pitch goes slightly higher in the 'happy' filter, voice stretching and mid frequencies volumes are increasing, and very high and low frequencies are decreasing. However, since the emphasis is also significant in sound, we were able to approach the desired sound even though we could not catch the emotion completely.

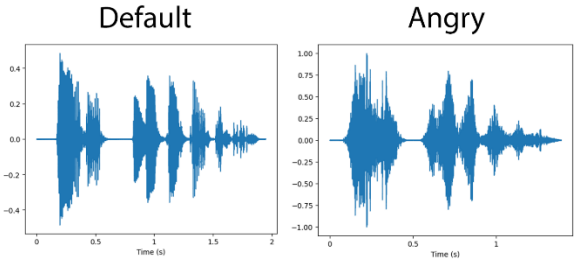


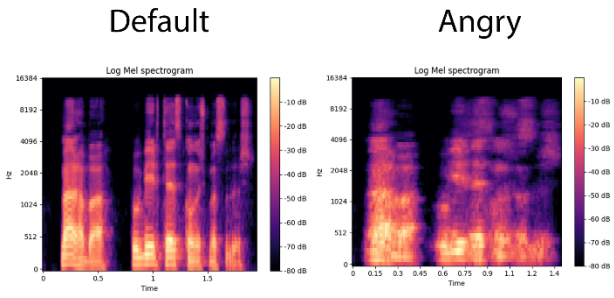
Default and Sad Waveforms



Default and Sad Log Mel Spectrograms

The Image ‘sad’ filter has a slightly increased pitch, mid frequencies are raised, and low frequencies are a bit higher than the ‘happy’ filter. Also, higher frequencies are lower than the ‘happy’ filter. Even though both higher and lower frequencies are lower than the ‘default’ filter. Mid frequencies are more elevated than ‘default.’ Again, since the emphasis is also significant in sound, we could approach the desired sound even though we could not catch the emotion completely.





The 'angry' filter has a slightly decreased pitch, low frequencies are decreased, mid frequencies are increased, and high frequencies are decreased, and the sound is a bit stretched compared to the default version. Again, since the emphasis is also significant in sound, we could approach the desired sound even though we could not catch the emotion completely.