

Paper title: Using Deep Audio Embeddings for Music Emotion Recognition

The following contents are included in this supplementary material.

- TSNE Visualization of L3-Net embeddings on 4Q Audio Emotion dataset
- TSNE Visualization of Feature sets by Panda et al. on 4Q Audio Emotion dataset (Features were extracted by a baseline MER model by Panda et al.)
- TSNE Visualization of VGGish embeddings on 4Q Audio Emotion dataset
- TSNE Visualization of L3-Net embeddings on Bi-modal Emotion dataset
- TSNE Visualization of VGGish embeddings on Bi-modal Emotion dataset
- TSNE Visualization of L3-Net embeddings on Emotion in Music dataset
- TSNE Visualization of VGGish embeddings on Emotion in Music dataset
- TSNE Visualization of L3-Net embeddings on RAVDESS singing dataset
- TSNE Visualization of VGGish embeddings on RAVDESS singing dataset

The following figures are TSNE Visualization of how the L3-Net and VGGish embedding method can classify different emotion categories. Each point denotes an audio clip. The x and y axes denote T-SNE projection axes.

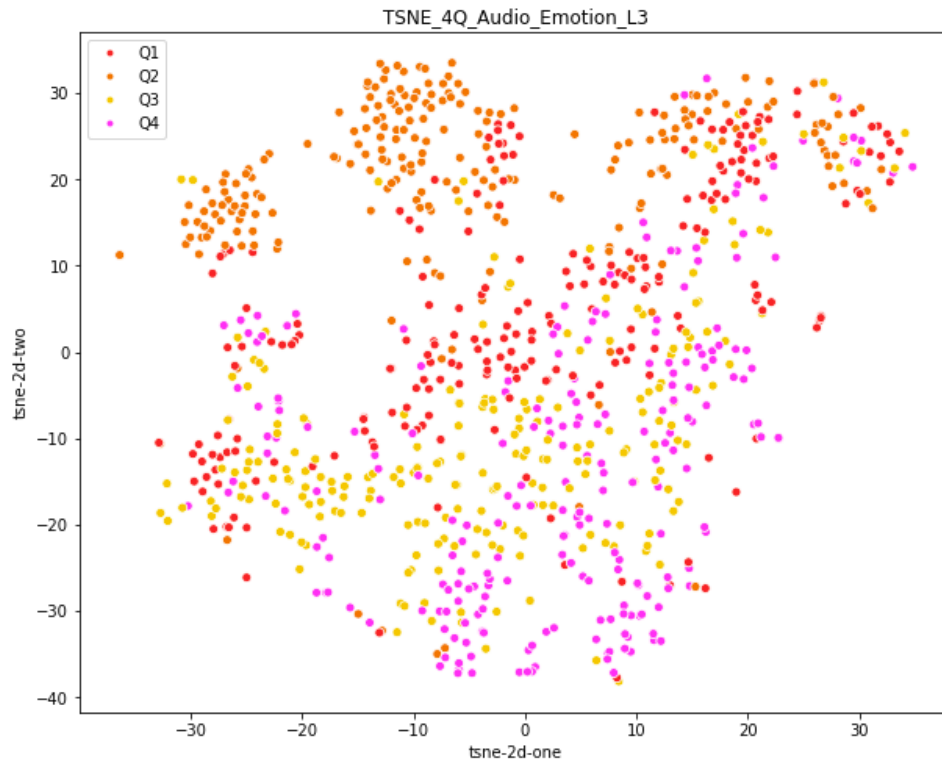


Figure 1-1: TSNE of L3-Net embeddings on 4Q Audio Emotion dataset

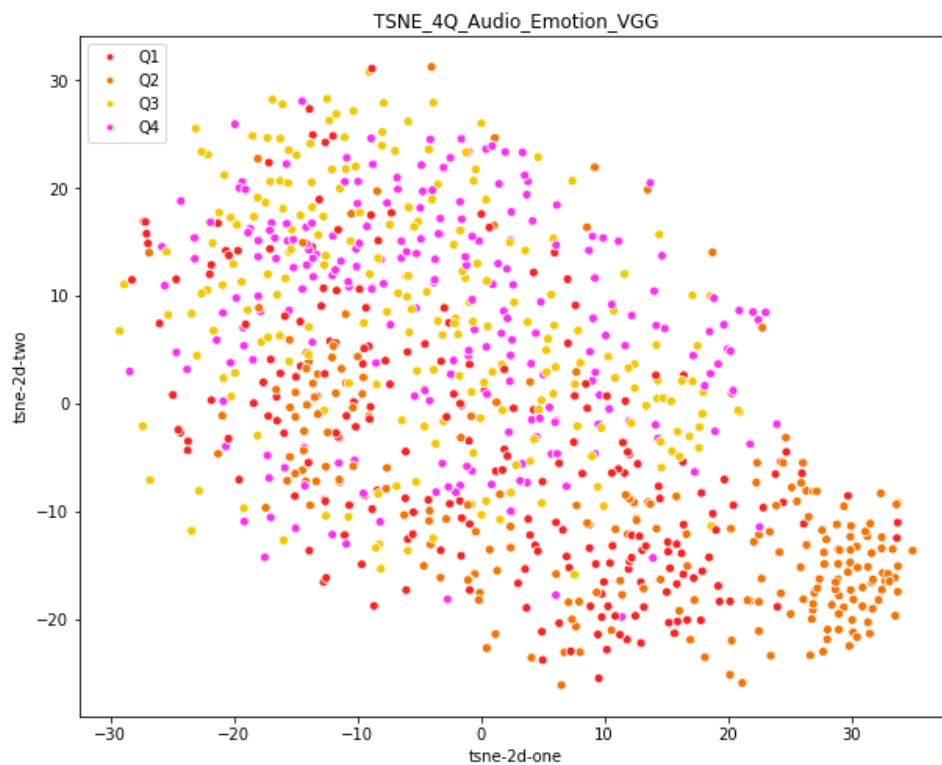


Figure 1-2: TSNE of VGGish embeddings on 4Q Audio Emotion dataset

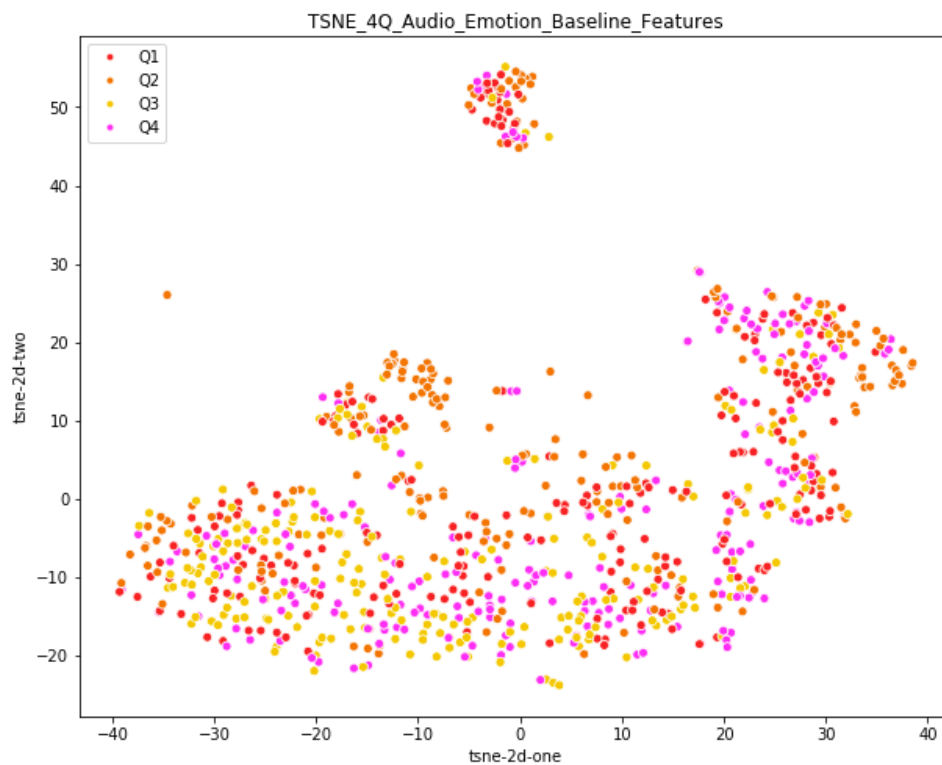


Figure 1-3: TSNE of Feature sets by Panda et al. on 4Q Audio Emotion dataset

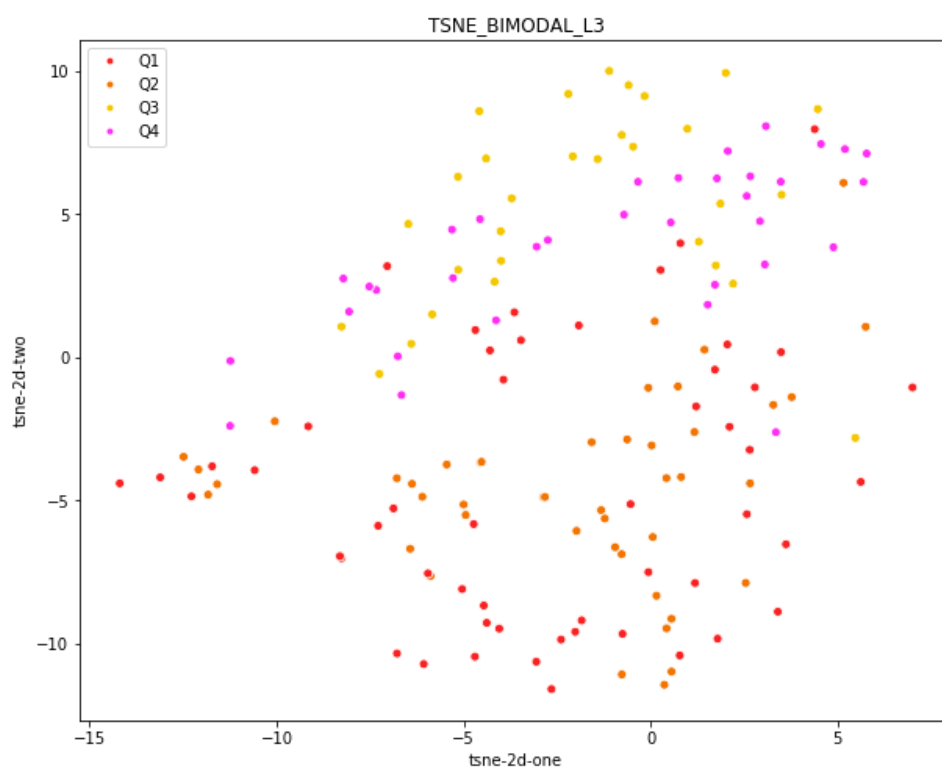


Figure 1-4: TSNE of L3-Net embeddings on Bi-modal Emotion dataset

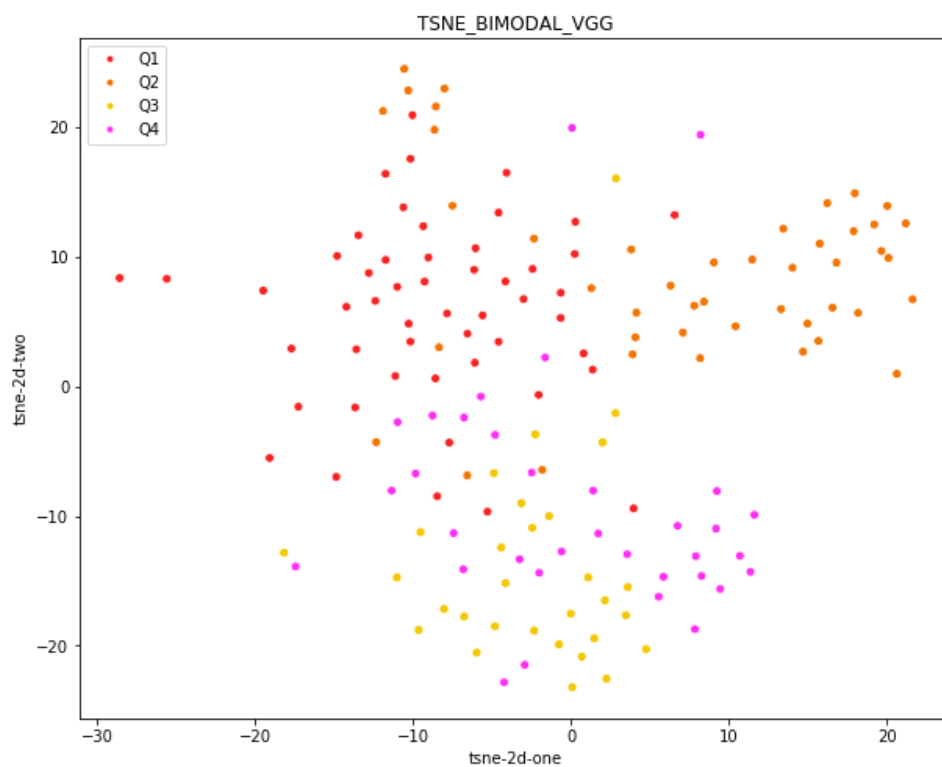


Figure 1-5: TSNE of VGGish embeddings on Bi-modal Emotion dataset

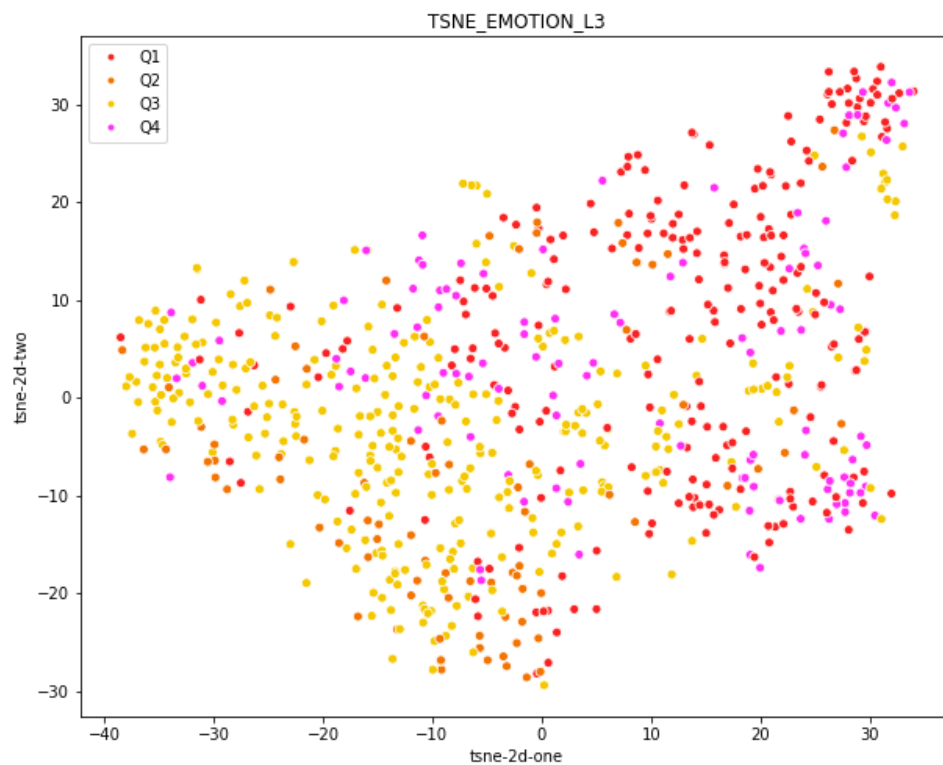


Figure 1-6: TSNE of L3-Net embeddings on Emotion in Music dataset

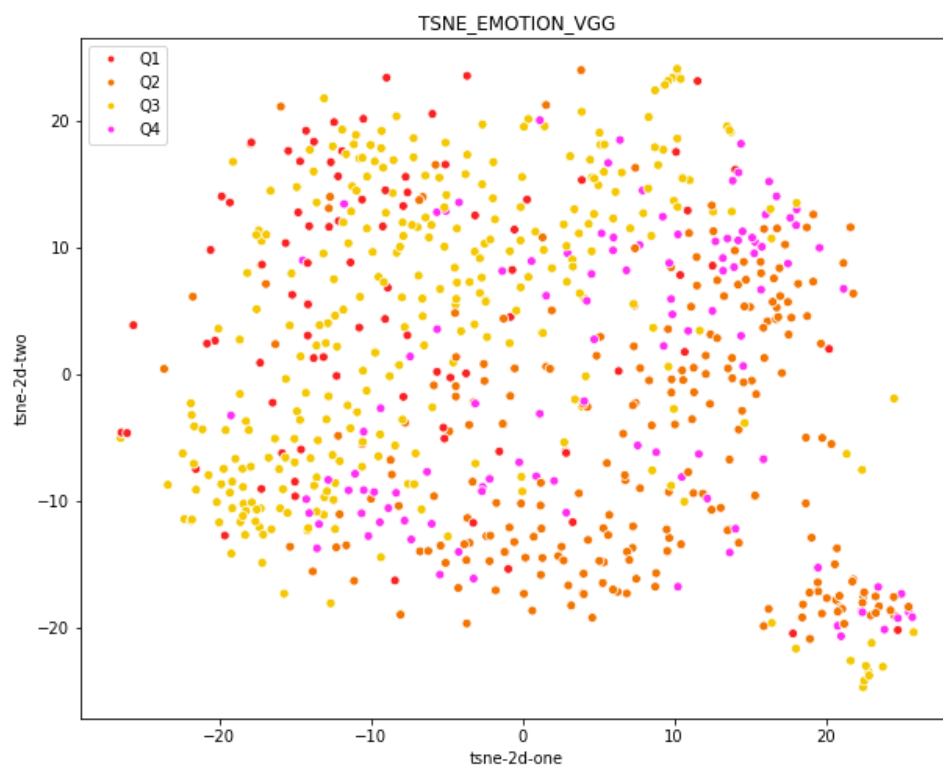


Figure 1-7: TSNE of VGGish embeddings on Emotion in Music dataset

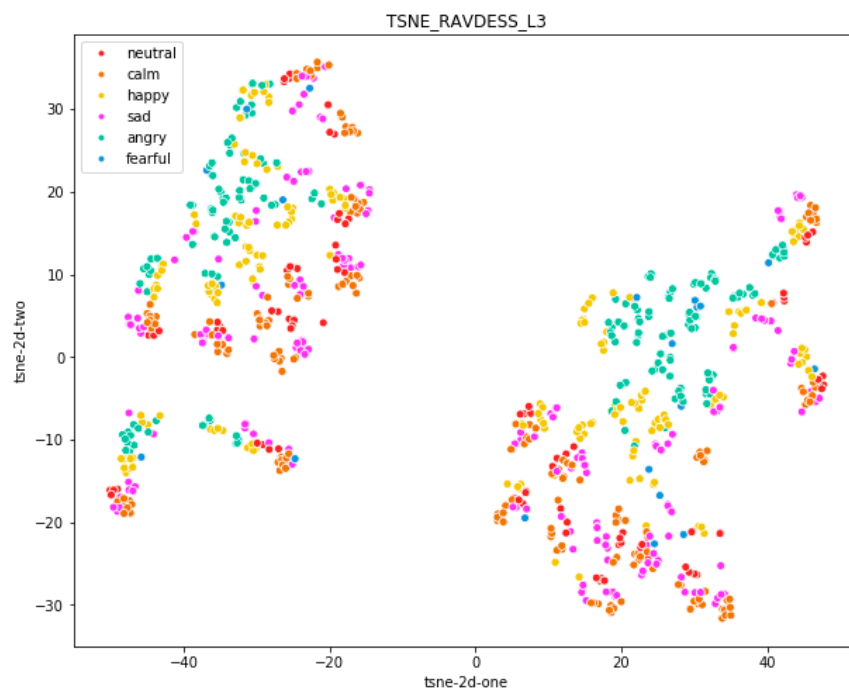


Figure 1-8: TSNE of L3-Net embeddings on RAVDESS dataset (clusters are located in the left/right sides of the figure based on female/male singer, and small clusters indicate each singer identification)

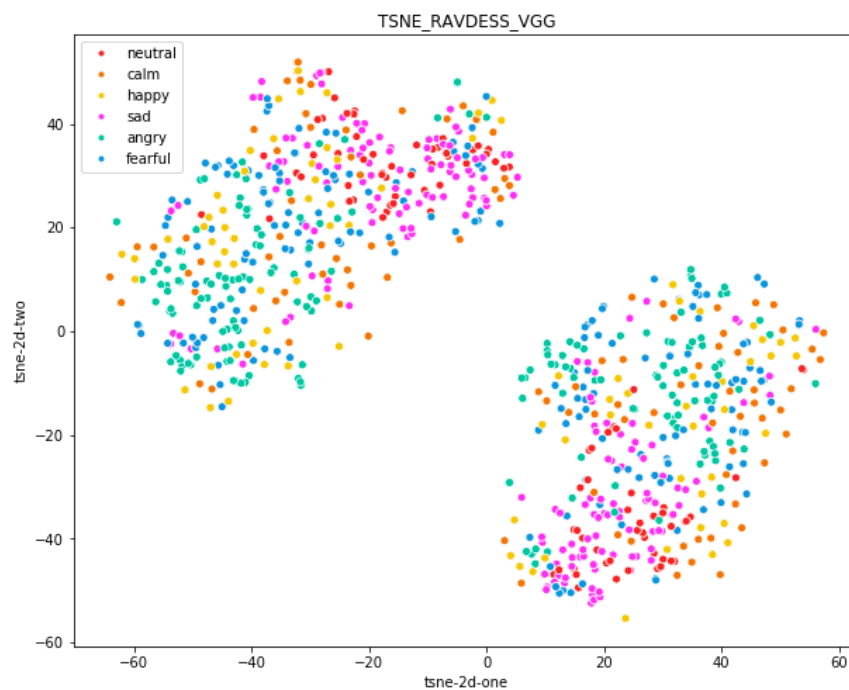


Figure 1-9: TSNE of VGGish embeddings on RAVDESS dataset (clusters are located in the left/right sides of the figure based on female/male singer)