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EMuTherapy

Multi Emotion based Music Therapy

using Ensemble Learning

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ABSTRACT

Recent years have seen a rise in interest in music therapy as a method for enhancing one's mental health; consequently, many psychologists are now recommending that their patients who are struggling with mental health concerns engage in this method. Music therapy is a therapeutic approach that makes use of music's intrinsic capacity to boost mood. As a result, individuals' mental health as well as their overall well-being can be enhanced via participation in music therapy. A music therapist can provide an excellent solution recommendation to a person who is seeking music therapy by making use of additional parameters.

The vast majority of methods for recommending music include reading people's reactions on their faces. The strategy that is being explored suggests using music therapy with a variety of feelings. Because if the user experiences more emotions, it contributes to a greater understanding of who the user is as a whole. The multi-label emotion detection method is the one that will serve the user best in the event that they have a sadly fear of feeling things. Transfer learning methods were utilized by the author despite the small dataset available to them. After that, the two models that were selected are integrated using the process of averaging. A more accurate output can be achieved through the application of ensemble learning. The completed model has the ability to reliably expect feelings.

Keywords: Multi-Label Image Classification, Computer Vision, Transfer Learning, Ensemble Learning, Deep Learning, Average Technique