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Emotion Based Music Player

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Abstract: The work presents described the development of Emotion Based Music Player, which is a computer application meant for all type of users, specifically the music lovers. Due to the troublesome workloads in songs selection, most people will choose to randomly play the songs in the playlist. As a result, some of the songs selected not matching the users' current emotion. Moreover, there is no commonly used music player which able to play the songs based on user's emotion. The proposed model is able to extract user's facial expression and thus detect user's emotion. The music player in the proposed model will then play the songs according to the category of emotion detected. It is aimed to provide a better enjoyment to music lovers in music listening. The scope of emotions in the proposed model involve normal, sad, surprise and happy. The system involves the major of image processing and facial detection technologies. Facial expression is a easy way and most ancient way of expressing emotion, feelings and ongoing mood of the person. This model based on real time extraction of facial expression and identify the mood. In this project we are using Haar cascade classifier to extract the facial features based on the extracted features from Haar cascade, we are using COHN KANADE dataset to identify the emotion of user. If the user's detected emotion is neutral then the background will be detected and the music will play according to the background.

Keywords: Emotion Recognition, Music Recommendation Systems, Facial Expression Analysis, Machine Learning in Music, Emotion-aware Computing

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