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Emotion Based Music Player

Aniket Gade[1], Aniket Sabale[2], Ankit Dhopte[3], Pratik Khetmalis[4], Prof Sandeep Patil[5]
Students, Department of Computer Engineering[1,2,3,4]
Professor, Department of Computer Engineering[5]
International Institute of Information Technology, Maharashtra, India

Abstract: *The Human Face is a crucial organ for assessing a person's emotions and behavior. Manual creation and organization of song playlists can be a time-consuming task. Existing algorithms for playlist recommendation are computationally slow, less accurate, and often require additional hardware like sensors or EEG. Our proposed system utilizes Facial Expression Recognition and feature extraction to automatically generate personalized playlists, reducing manual effort and rendering time. By capturing facial expressions through the device's camera, emotions are extracted and classified into mood classes. These features are then used to recommend dynamic playlists. Music plays a vital role in entertainment and well-being, with research showing its positive effects on mood and stress reduction. Our goal is to leverage deep learning technology to enhance user experience. Unlike previous methods that relied on predefined labeled data, our approach is user-specific and employs faster and more efficient algorithms for playlist recommendation. Random songs from genre-specific to the detected mood are chosen, ensuring a dynamic and diverse music selection for the individual.*

Keywords: Emotion-based music player, facial expression recognition, personalized playlists, dynamic algorithm

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