

Music Melodies Based on Facial Expressions

Prof. Roshani V. Pawar¹, Aachal Bari², Prachi Aambavade³, Sakshi Khandagale⁴

Assistant Professor, Computer Engineering¹

Students, Computer Engineering²⁻⁴

NBN Sinhgad Technical Institutes Campus, Pune, India

Abstract: *In recent years, with the development and application of big data, deep learning has received more and more attention. As a deep learning neural network, convolutional neural network plays an extremely important role in face image recognition. In this paper, a combination of micro-expression recognition technology of convolutional neural network and automatic music recommendation algorithm is developed to identify a model that recognizes facial micro- expressions and recommends music according to corresponding mood. This research helps to improve the practicality of the music recommendation system, and the related results will also serve as a reference for the application of the music recommendation system in areas such as emotion regulation.*

Keywords: Face Detection, Face Embedding, Face Extraction, Mood Predictions, Music Recommendation

