

Review on Facial Expression Based Music Recommendation System

Prof. Renuka Kajale¹, Ms. Ayushi Kale², Ms. Asawari Khairnar³, Ms. Vaishnavi Mavale⁴

Assistant Professor, Department of Computer Science¹

Students, Department of Computer Science^{2,3,4}

Nutan Maharashtra Institute of Engineering and Technology, Pune, India

Abstract: *The Emotion-Aware Smart Music Recommendation System represents a pioneering venture in the realm of music technology, aiming to revolutionize the way we connect with music. This system employs advanced emotion recognition techniques, including facial expression analysis, voice sentiment analysis, and biometric sensors, to continuously assess the user's emotional state. Complemented by a meticulously curated music database with songs categorized based on emotional attributes, the system's recommendation engine utilizes machine learning and deep learning models to offer music that aligns with the user's current emotional profile. The integration of a feedback loop ensures that the system adapts and refines its recommendations, improving the user's experience over time. Accessible across a variety of platforms, including mobile apps, web interfaces, and smart speakers, this system aspires to offer a profoundly personalized and emotionally resonant listening experience, redefining the relationship between music and emotion.*

Keywords: Emotion, Music, Facial Expression, Recommendation System

REFERENCES

- [1]. Yao L S, Xu G M, Zhap F. Facial Expression Recognition Based on CNN Local Feature Fusion[J]. Laser and Optoelectronics Progress, 2020, 57(03): 032501.
- [2]. Li Huihui. Research on facial expression recognition based on cognitive machine learning [D]. Guangzhou: South China University of Technology, 2019.
- [3]. Zou Jiancheng, Deng Hao. An automatic facial expression recognition method based on convolutional neural network [J]. Journal of North China University of Technology 2019,31 (5): 51-56.
- [4]. Li Siqian, Zhang Xuanxiong. Research on Facial Expression Recognition Based on Convolutional Neural Networks [J]. Journal of Software, 2018, v.17; No.183 (01): 32-35.
- [5]. Hafeez Kabani, Sharik Khan, Omar Khan and Shabana Tadvi, "Emotion based Music Player," Int. J. of Eng. Research and General Sci., Vol. 3, Issue 1, pp.750-756, January- February 2015.