

PRESIDENCY UNIVERSITY PRESIDENCY SCHOOL OF INFORMATION SCIENCE MCA PROJECT 2025 ABSTRACT REVIEW FORM

Project No: 223	Name of Student: Meghana M	Section: 4MCA-05			
Project Title: Al-Powered Mood-Based Music Recommender Using Facial Emotion Recognition					
ABSTRACT					

Music has a profound influence on human emotions, making it an essential tool for relaxation, motivation, and emotional regulation. Traditional music recommendation systems primarily rely on user preferences, historical data, or manual selection, often failing to consider realtime emotional states. This project introduces a Al-Powered Mood-Based Music Recommender Using Facial Emotion Recognition that utilizes face recognition and emotion detection to dynamically suggest music based on a user's current mood. The system captures real-time facial expressions using a webcam or camera-enabled device. It processes the facial features using computer vision and deep learning techniques to classify emotions into predefined categories such as happiness, sadness, calmness, anger, or excitement. Based on the detected emotion, the system recommends a personalized playlist that aligns with the user's mood, enhancing their listening experience. The implementation consists of face recognition, emotion classification, and a music recommendation algorithm. Convolutional Neural Networks (CNNs) are used for facial expression analysis, while a curated music database is employed to suggest songs based on emotion mapping. This approach ensures a more immersive and emotionally connected music recommendation system. Applications of this system extend beyond entertainment, including mental wellness, stress relief, and therapy, where mood-based music can help regulate emotions. Additionally, it can be integrated into smart home systems, mobile applications, and AI-driven personal assistants to enhance user experience. By bridging the gap between technology and human emotions, this project aims to make music recommendations more intuitive, adaptive, and user-centric.

Keywords: Face Recognition, Emotion Detection, Music Recommendation System, CNN, AI&ML

Criteria	Rating (1 to 5)
Clarity of the Problem Statement	
Relevance of the Project	
Objectives	
Innovation and Originality	
Suitability for Research Publication	

Overall Assessment	Comments
Strengths of the Abstract:	
Weaknesses or Areas for Improvement:	

Recommendations	Approve	Revise Reje	ct
Supervisor's Signature with Name			
Date:			_