IJARSCT



International Journal of Advanced Research in Science, Communication and Technology

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 5, Issue 6, May 2025



Singer Identification by Vocal Parts Detection

Abhale B A¹, Dr. Rokade P. P.², Sanap Abhishek³, Kasar Pushkaraj⁴, Thorat Pranjal⁵, Gudaghe Sachin⁶ Information Technology & Engineering

SND College of Engineering & Research Center, Yeola, Maharashtra, India

Abstract: Singer identification is a fundamental task in music information re trieval (MIR) and audio signal processing, with applications rang ing from music recommendation systems to copyright protection. This research explores the use of deep learning techniques, par ticularly Convolutional Neural Networks (CNN) and Multi-Layer Perceptrons (MLP), for the identification of singers based on their unique vocal characteristics. The approach involves extracting vocal segments from audio recordings and processing them using feature extraction techniques such as Mel- Frequency Cepstral Coefficients (MFCCs), chroma features, spectral contrast, and timbral features. The extracted features serve as input for both CNN and MLP model

Keywords: Singer identification





809