Cognition Technique for Developing a World Music

Authors: Haider Javed Uppal, Javed Yunas Uppal

Abstract: In today's globalized world, it is necessary to develop a form of music that is able to evoke equal emotional responses among people from diverse cultural backgrounds. Indigenous cultures throughout history have developed their own music cognition, specifically in terms of the connections between music and mood. With the advancements in artificial intelligence technologies, it has become possible to analyze and categorize music features such as timbre, harmony, melody, and rhythm and relate them to the resulting mood effects experienced by listeners. This paper presents a model that utilizes a screenshot translator to convert music from different origins into waveforms, which are then analyzed using machine learning and information retrieval techniques. By connecting these waveforms with Thayer's matrix of moods, a mood classifier has been developed using fuzzy logic algorithms to determine the emotional impact of different types of music on listeners from various cultures.

Keywords: cognition, world music, artificial intelligence, Thayer's matrix

Conference Title: ICCM 2024: International Conference on Cognitive Musicology

Conference Location : Zurich, Switzerland Conference Dates : January 11-12, 2024