Abstract

Muhammad Kamal Yasya, 92216162
TESTING THE ACCURACY OF CHORDS IN PIANO MUSIC USING THE CONVOLUTIONAL NEURAL NETWORK (CNN) METHOD.

Keywords : Convolutional Neural Network (CNN), Chromagram, Chord Recognition

(xviii+ 54+ attachment)

The implementation of artificial intelligence in the world of discussion has been classified as many, but many of these implementations are still less accurate in terms of accuracy such as Chord Recognition. Chord Recognition is a system or application for knowing or measuring chords correctly. To build the system, methods are needed so that the accuracy generated is high. Some methods that are often used are Convolutional Neural Network (CNN) methods. This study aims to measure the accuracy of chord recognition from piano and bass audio by using the Convolutional Neural Network (CNN) method and utilizing chromagrams in the transformation of audio to image form. The data used in this study consisted of 12 major classes and 12 minor classes. Based on the results of tests conducted, the accuracy of each class gives a pretty good F1 value. The average F1 value of the whole chord recognition test based on the root tone is 87%.

Bibliography (2015 - 2020)