

Abstract

Playing music is one of the most popular hobby and profession in the world. One thing that simply can't be detached from music is chord. One of the most noticed problem in research about chord recognition is the high need of time resource for the training process. With the Nested Perfect Fifth Circle method, chord recognition based on Hidden Markov Model can work properly and need no training at all.

One of the most popular feature used in the chromagram calculation in a chord recognition system based on Hidden Markov Model which need training is chroma-log-pitch feature. It comes to a resolution that chroma-log-pitch feature doesn't give a better result compared to chroma pitch feature in case of rock song chord recognition. In contrary, chroma-log-pitch feature gives a better result in techno/K-pop song chord recognition compared to chroma pitch feature. Nested Perfect Fifth Circle can be a method transition probability calculation and giving a lot more free time because of there's no training needed.

Keywords: chord, chromagram, nested perfect fifth circle