Abstract

A chord consists of multiple tones that are played simultaneously. Substitution chord from time to time, representate the core of harmony in a musical. In every chord there is a uniquecharacteristic as a distinguishing one chord to another. To be able to recognize chords of a song it needs a musician instinct who often create and play songs. Seeing these conditions, we need a tool that can recognize chord of a song automatically.

Hidden Markov Model (HMM) is a highly successful method used in speech recognition. Therefore, HMM used to solve chord regognition problem. A Chord directly analogous to word models in a speech recognition system. HMM is a statistical model of a system that assumed a Markov Process with unknownparameters (hidden). The system is implemented method of HMM to recognize chords of a music/song file by first extracting the characteristic features. Representation of the characteristic features of this program is the *chroma* representation or Picth Class Profile (PCP). With features *chroma* / PCP, a chord can be represented in a short feature vector.

The program will output the built form of chord sequence of a music/song. Through the software is expected to assist the user who want to play music when the user does not know or have difficulty in recognizing the chord of a song.

Keywords : Music, Chord, Chroma Vectors, Hidden Markov Models.