

ABSTRACT

Basically everyone can singing. But the level of tone sensitivity of each person's are different. The tone sensitivity will affect the harmonization of the tone of the song being sung. For some people who have good tone sensitivity it is easy to sing a song with two notes at once (first tone and second). However, for beginners will have difficulty even just one notation only.

This model comes to help beginners who want to learn to sing with the correct notation and even solving one and two notations. The conversion of a person's singing tone can be done by the Digital Signal Processing method. Digital Signal Processing method used is Fast Fourier Transform (FFT). This model is using Matlab software. From the captured voice will be converted to the correct notation. Furthermore, the tone or sound is resurrected with two different types of tones simultaneously in accordance with its harmonization by using Pitch Shifting. This system read frequencies with precision 100% of the four frequency reading tests. The system also generates one and two sound tones, namely single tone notation of human voice with an average accuracy rate of more than 90% of five test tones. So, that beginner singers can learn to solve one and two notes of the songs they sing with the correct notes.

Keywords: notation, tone, Digital Signal Processing, Fast Fourier Transform, Pitch Shifting, Matlab