

ABSTRACT

Stomatitis Aftosa Rekuren (SAR), which in ordinary people known as canker sores is a very common disease, sometimes to cause serious problems, until the patient has difficulty speaking, therefore to upgrade the facilities in dentistry and mouth, writer wish to do research about detection of oral cavity infection, where the system is used to detect the patient's oral cavity, so patients do not complaints too difficult that can trigger the pain, and take measurements with some of the patient's specific sentence parameters.

This final assignment detects infections in the oral cavity in speech processing. The detection process starts from healthy and sick voice recording input on the training data in (. Wav) then preprocessing is done. The sound signal is transformed by MFCC and 6 statistical parameters are added which are then processed by the DT to determine the speech sound is detected or not.*

The test results that have been done are changing the sampling frequency, MFCC coefficient and frame size. The best accuracy is obtained 92.85% at the sampling frequency of 8000 Hz, the MFCC coefficient is 20 and the frame size is 512. The accuracy uses 30 training data and test data which each consists of 12 sick sounds and 18 healthy sounds.

Keywords: Mel-frequency cepstral coefficients (MFCC), Decision Tree (DT).