ABSTRACT

This study discusses the sign language translator to text that refers to the SIBI (Indonesian Sign Language System) with video input. In this experiment, invariant moment method used for feature extraction and Support Vector Machine as classifier. The process in this study are hands trackingbased on skin color segmented using skin detection in the YCbCr color space. Then cropping the hand and converted to grayscale and compute moments vector value using invariant moment. Next, train the seven moments to obtain training data and then classified with Support Vector Machine (SVM).

Tests from 17 word got 80,63% accuracy rate. Testing is done by changing the kernel parameters on SVM with OAA algorithm and the best results obtained by using RBF kernel and input for classifier using the seven moments value.

Keywords: sign language, invariant Moments, Support Vector Machine