

ABSTRACT

Communication is one of the most important things for human life. Especially for the deaf, they have limitations in communicating with others. They can communicate using sign language. Sign language recognition system is needed as a means of communication for deaf and people who do not understand sign language.

Form of hand gestures detected by the sensor and the image depth human skeleton on Kinect, modified and translated into a text. Results of raw footage of data segmentation and tracking Kinect in hand with Haar Cascade and classified by the method Hidden Markov Model (HMM).

With the combination of image sensor and human depth skeleton on Kinect and classification methods HMM sign language recognition accuracy rate can reach 82% and the average computation time of 1.98 seconds.

Keyword: Indonesia sign language, depth image, human skeleton, Kinect