

Software-based Malaysian sign language recognition

Abstract

This work presents the development of a software-based Malaysian Sign Language recognition system using Hidden Markov Model. Ninety different gestures are used and tested in this system. Skin segmentation based on YCbCr colour space is implemented in the sign gesture videos to separate the face and hands from the background. The feature vector of sign gesture is represented by chain code, distance between face and hands and tilting orientation of hands. This work has achieved recognition rate of 72.22%.