PROBLEM STATEMENT

Humans have the ability to recognize body and sign language but computers don't have this ability. Humans can recognize sign language because of the combination of vision and synaptic interactions with brain. To make computer recognize sign language we need to replicate this skill to computers. In order to maintain the doctor's hand sterile inside the operation room hand gesture can be used. The use of doctor-computer interaction devices in operation room requires new modalities that supports medical image manipulation by allowing doctor's hand to remain sterile, supporting then to focus, attention and by providing fast response. In this project, gesture based desktop automation model is used, first the model is pre-trained on the images of different hand gestures, such as a showing numbers with fingers as 1 ,2,3,4 etc. This model uses the integrated webcam to capture the video frame. The image captures in video frame is compared with the pre-trained model and gesture is identified.