

# Survey on Vision Based Hand Gesture Interface for Controlling Multimedia Player

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**Abstract:** *As computers become additional pervasive in society, facilitating natural human-computer interaction (HCI) can have a positive impact on their use. Hence, there has been growing interest within the development of recent approaches and technologies for bridging the human-computer barrier. The last word aim is to bring HCI to a regime wherever interactions with computers are going to be as natural as associate degree interaction between humans, and to the current finish, incorporating gestures in HCI is a crucial analysis space. Gestures have long been thought-about as associate degree interaction technique that may doubtless deliver additional natural, creative, and intuitive strategies for human activity with our computers. Hand gesture recognition is one amongst the systems that may notice the gesture of the hand in a period of time video. The gesture of hand is classed inside a definite space of interest. during this study, planning hand gesture recognition is one among the difficult jobs that involves 2 major issues. foremost is that the detection of the hand. Another drawback is to form an indication that's appropriate to be used one hand at a time. This project concentrates on however a system might notice, acknowledge and interpret hand gesture recognition through computer vision with the difficult factors that variability within the create, orientation, location, and scale. To perform well for developing this project, differing kinds of gestures like numbers and sign languages got to be created during this system. The image taken from the period of time video is analyzed via Haar-cascade Classifier to notice the gesture of hand before the image process is finished or in different words to notice the looks of hand in a very frame. during this project, the detection of hand are going to be done mistreatment the theories of Region of Interest (ROI) via Python programming. the reason of the results are going to be targeted on the simulation half since the distinction for the hardware implementation is that the ASCII text file to scan the period of time input video. the event of hand gesture recognition mistreatment Python, OpenCV, and YOLO V3 will be enforced by applying the theories of hand segmentation and also the hand detection system that uses the Haar-cascade classifier.*

**Keywords:** Hand Gesture, OpenCv, Python, Machine Learning

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