

# Audio Control using Gestures

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**Abstract:** *In this paper we are growing a audio controller wherein we are using hand gestures as the input to control the system , OpenCV module is largely used on this implementation to govern the gestures. This device basically make use of the web camera to record or capture the images or videos and hence based totally on the input, the audio of the system is managed via this application. The main characteristic is to increase and decrease the volume of the system. The challenge is applied using Python and OpenCV. We can use our hand gestures to control the basic operation of a computer like increasing and decreasing volume. Consequently, people will not need to research machine-like skills which might be a burden maximum of the time. This type of hand gesture system provides a natural and innovative new way of nonverbal communication. These systems have a wide area of application in human computer interaction (HCI). The reason of this machine is to discuss about audio control using hand gesture recognition system based on detection of hand movement. In this the system consist of a high- resolution camera to capture the gesture taken as input by the user. The main goal of hand gesture recognition is to create a system which can pick out the human hand movement and use same input as the information for controlling the device and by using actual time gesture reputation particular customer can manipulate a pc by means of the use hand gesture in front of a system video camera linked to a computer. In this project we are growing a hand gesture volume controller system with the help of OpenCV, Python. In this system can be controlled by hand gesture without making use of the keyboard and mouse.*

**Keywords:** Hand gesture, OpenCV-Python, volume controller, media pipe package , NumPy package , Human computer Interface.

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