3. SIGN LANGUAGE RECOGNITION USING IMAGE PROCESSING

Hands Are Human Organs Used To Manipulate Physical Objects And For This Very Reason They Are Most Frequently Used By Humans To Interact With Machines. Mouse And Keyboard Are The Basic Input/Output To Computers And The Use Of Both Of These Devices Require The Hands. If Computers Could Understand And Interpret Hand Gestures It Would Be A Huge Leap Forward In The Field Of Human Computer Interaction. Gesture Recognition Is An Area Of Active Current Research In Computer Vision. Existing Systems Use Hand Detection Primarily With Some Type Of Marker.

Our System, However, Uses A Real-Time Hand Image Recognition System. In This Paper, A Computer Vision-Based Bangladeshi Sign Language Recognition System (Bdsl) Has Been Proposed. A Novel Method Of State Estimation Has Been Developed To Track The Motion Of Hand In Three Dimensional Spaces. Prototype Was Tested For Its Feasibility In Converting Indian Sign Language To Voice Output. Though The Glove Is Intended For Sign Language To Speech Conversion, It Is A Multipurpose Glove And Finds Its Applications In Gaming, Robotics And Medical Field.

In This Paper, We Have Developed A Novel Sign Language Learning System Based On 2D Image Sampling And Concatenating To Solve The Problems Of Conventional Sign Recognition. Since The Learning Data Used In This Paper Was Only 20 Cases, If We Can Obtain And Use Data In More Various Situations, We Can Learn More Various Actions With Higher Success Rates.