STUDY OF VISION BASED HAND GESTURE RECOGNITION USING INDIAN SIGN LANGUAGE

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Abstract- Human Computer Interaction moves forward in the field of sign language interpretation. Indian Sign Language (ISL) Interpretation system is a good way to help the Indian hearing impaired people to interact with normal people with the help of computer. As compared to other sign languages, ISL interpretation has got less attention by the researcher. In this paper, some historical background, need, scope and concern of ISL are given. Vision based hand gesture recognition system have been discussed as hand plays vital communication mode. Considering earlier reported work, various techniques available for hand tracking, segmentation, feature extraction and classification are listed. Vision based system have challenges over traditional hardware based approach; by efficient use of computer vision and pattern recognition, it is possible to work on such system which will be natural and accepted, in general.

Index terms: Indian sign language, vision based hand gesture recognition, hand tracking, segmentation, feature extraction, classification, computer vision, pattern recognition