Abstract

In recent years, lot of research is done in regard to the use of computers to recognize sign language. Computer recognition of sign language is an important research problem for enabling communication with hearing impaired people without the help of interpreter. In this article we propose a method to detect the static image based number of American Sign Language (ASL). This method is based on counting the open fingers in the static images and extracting the feature vector based on the successive distance between the adjacent open fingers. Further neural network is used for the classification of these numbers. This method is qualified to provide an average recognition rate of 92 percent.

References

- Henrik Birk and Thomas Baltzer Moeslund, "Recognizing Gestures From the Hand Alphabet Using Principal Component Analysis", Master’s Thesis, Laboratory of Image Analysis, Aalborg University, Denmark, 1996.
- Thomas G. Zimmerman and Jaron Lanier, "A Hand Gesture Interface

Index Terms

Computer Science
Information Science
### Keywords

- ASL Number
- Neural Network
- Static Hand Gesture Recognition
- Open-finger Distance
- Thinning.