Paper Review 4

Abstract: Sign Language is the mode of communication among the deaf and dumb. However, integrating them into the main stream is very difficult as the majority of the society is unaware of their language. So, to bridge the communication gap between the hearing and speech impaired and the rest in Bangladesh, we conducted a research to recognize Bangla sign language using a computer-vision based approach. To achieve our goals we used Artificial Neural Networks to train individual signs. In the future, this research, besides helping as an interpreter, can also open doors to numerous conveniently other applications like sign language tutorials or dictionaries and also help the deaf and dumb to search the web or send mails more.

Introduction: Sign language is the mode of communication among the deaf and the dumb. A common misconception about sign language is that it is universal, which is however not case. Sign language use manual gestures and body language to convey meaning. Static signs are generally used for alphabets and numbers where hand shapes define each other.

Methods: To identify the best approach for a sign language translation system, one of the early steps is to review journal articles and conference papers related to this system. So our project recognizes text in three main steps:

1. Capturing image of the hand showing the sign,

2. Recognition of hand sign.

Results: For the ASL dataset a total of 10 epoch were run for an accuracy of 99.7%

Discussion: Discussion: We made plans for the future work. Our future work will be

1. Use data augmentation to increase the size of our datasets, especially, our own Bangla dataset.
2. Translate the English sentences to Bangla and compare it with the sentences found from the Bangla dataset.

Conclusion: The paper presents a comparison among the research works had done for development of the communication system between Bangla sign language and Bangla language. It also proposed a two way communication system for BDSL to Bangla Language. So in this paper we described the implementation of a system which translates American Sign Language to English and Bangla Sign Language to Bangla. We also have explained the importance of BSL translator for interacting with speech impaired people.