Abstract

This paper proposes a Bangladeshi sign language recognizer (BdSLR), an initiative to recognize sign language of Bangladeshi deaf and mute (D&M) people. Although all over the world, the D&M people are a part of the community, the communication between the general and the D&M people becomes tough when interaction is required. Moreover in different races, the D&M people use different sign languages. In this regard BdSLR has been developed that can interpret Bangladeshi sign language into Bengali text and vice versa. In BdSLR, the inputs of Bangladeshi sign language have been taken by webcam and later on recognized by efficient Neural Network Ensemble (NNE). Without any major modification, BdSLR can be used as an interpreter for the sign languages of other races. In the Proposed BdSLR the use of an efficient NNE technique converges the training time faster and recognizes with good generalization ability.
- Centre for Disability in Development (CDT), "Manual on Sign Supported
Bangladesh Sign Language Recognition Employing Neural Network Ensemble


**Index Terms**

Computer Science  
Pattern Recognition

**Keywords**

Neural network ensemble  
Negative correlation learning  
Feature extraction

Bangladeshi sign language