LITERATURE SURVEY

Paper Title : A Modified LSTM Model for Continuous Sign Language Recognition Using Leap Motion

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Abstract : Sign language facilitates communication between hearing impaired peoples and the rest of the society. A number of sign language recognition (SLR) systems have been developed by researchers, but they are limited to isolated sign gestures only. In this paper, we propose a modified long short-term memory (LSTM) model for continuous sequences of gestures or continuous SLR that recognizes a sequence of connected gestures. It is based on splitting of continuous signs into sub-units and modeling them with neural networks. Thus, the consideration of a different combination of sub-units is not required during training. The proposed system has been tested with 942 signed sentences of Indian Sign Language (ISL). These sign sentences are recognized using 35 different sign words. The average accuracy of 72.3% and 89.5% has been recorded on signed sentences and isolated sign words, respectively.

Drawbacks:

Most of existing recognition systems work with sequentially performed manual actions, due to their excessive use in gesticulation and ease of system development.