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Real Time Hand Gesture Recognition System

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Abstract: With the rapid development of computer vision, the need to interact with the human machine is growing. Since hand gestures can convey rich information, hand gestures are widely used in robot control, smart furniture and other features [1][2]. Sign language is one way to communicate with deaf people. In these sets of functions, the features included and the linguistic diversity of the areas have been major obstacles that have led to small ISL research. One has to learn sign language to communicate with them. Learning often takes place in groups of peers. There are very few reading materials available for learning the signs. Because of this, the process of learning sign language is a daunting task. The first step is to learn to read a handwritten signature and, moreover, they are used if there is no corresponding sign available or the signatory is unaware of it. Most sign language tools are available using expensive external sensors. Our project aims to extend a step forward in the field by collecting data and using a variety of features to generate useful information into various supervised learning strategies. Currently, we have reported four times the results of different approaches, and the difference in the previous work may have been due to the fact that in our four-fold verification, the verification set is accompanied by photos of a different person on the street. training set.

Keywords: Data, Sign Language, Convolutional Neural Network, hand gestures

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