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(57) Abstract:

Communication is a crucial part of every meaningful relationship between people. It has always been difficult to communicate between a deaf-mute and a regular person. Sign Language Recognition (SLR) aims to translate sign language into text or speech in order to improve communication between deaf and hearing persons. It facilitates and streamlines the process of integrating them with others. This communication gap, which has existed for years, can now be filled thanks to the introduction of several ways to automate the detection of sign motions. The user must be able to shoot hand motions with a web camera, and the system must anticipate and display the image's name. The HSV colour method and a black background to detect the hand gesture. Grayscale conversion, dilatation, and masking are among the computer vision techniques used to process the images. The gesture has been divided into two parts. To address this issue, we offer a unique convolutional neural network (CNN) that automatically extracts discriminative spatial-temporal characteristics from raw video streams without the need for prior information, removing the need to build features. Recognize ten different American Sign gesture alphabets with accuracy. Our model is quite accurate, with a rate of above 90%. Figure related to the abstract is

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