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Indian Sign Language Recognition

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Abstract: *Sign language is one of the oldest and most natural forms of language for communication, but since most people do not know sign language and interpreters are very difficult to come by, we have come up with a real-time method using neural networks for fingerspelling-based Indian Sign Language. We collected a dataset of depth based segmented RGB image for classifying 36 different gestures (alphabets and numerals). The system takes in a hand gesture as input and returns the corresponding recognized character as output in real time on the monitor screen. For classification we used Convolutional Neural Network. Our method provides 95.7 % accuracy for the 36-hand gesture.*

Keywords: Sign Language, RGB, Gestures, Convolutional Neural Network.

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