

Sign Language Translator Using Deep Learning

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Abstract: People suffering from speech impairment can't communicate using hearing and speech methods, they believe signing for communication. Sign language is employed among everybody who is speech impaired, but they find a tough time in communicating with people which are non-signers (people aren't proficient in sign language). So, requirement of a symbol language interpreter may be a must for speech impaired people. There has been favourable progress within the field of gesture recognition and motion recognition with current advancements in deep learning. There has been quite a significant development in computer vision which would enable us to easily track the hand gestures. The proposed system tries to try to a true time translation of hand gestures into equivalent English text. This system takes hand gestures as input through video and translates it text which might be understood by a non-signer. There will be use of CNN for classification of hand gestures. By deploying this technique, the communication gap between signers and non-signers will be reduced and they will be easily able to communicate with normal people.

Keywords: CNN (Convolutional Neural Network), Gesture Recognition, Motion Recognition.

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