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Invention Title	MACHINE LEARNING BASED SYSTEM TO TRANSLATE TEXT TO SIGN LANGUAGE USING NATURAL LANGUAGE PROCESSING TO ASSIST DEAF AN HEARING IMPAIRED PEOPLE
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Abstract:

It is learnt from the literature that there are nearly 70 million deaf people around the globe (according to the data from World Federation of the Deaf (WFD)). Sign Languag as one of the primary ways of communication to the deaf people and people suffering from hearing impairment. According to linguistics, sign language has characteristics as phonology, syntax and morphology just similar to other languages. In general, sign is an intersection of three units namely hand position, hand movement and shape o hand. Proposed is a machine learning based system to translate sign language using Natural Language Processing. Gathered data is trained using Convolution Neural Net to map the text to the hand movements. Convolution Neural Networks are a capable tool to capture numerous photos, learn and classify according to the category and tra the same using Natural Language Processing. It performs mapping of alphabets to 26 hand signals including delete and space sign. Featured maps are subject to alternat convolution and sub sampling to map to a fully connected output. The trained data from pooling layers are filtered and are connected to corresponding signs in sign langu

<div align="center">Complete Specification</div>

Claims:In this invention on MACHINE LEARNING BASED SYSTEM TO TRANSLATE TEXT TO SIGN LANGUAGE USING NATURAL LANGUAGE PROCESSING TO ASSIST DEAF AND HEARING IMPAIRED PEOPLE, we claim that

1.   It is learnt from the literature that there are nearly 70 million deaf people around the globe (according to the data from World Federation of the Deaf (WFD)). Sign Language serves as one of the primary ways of communication to the deaf people and people suffering from hearing impairment. According to linguistics, sign language has characteristics such as phonology, syntax and morphology just similar to other languages. In general, sign is an intersection of three units namely hand position, han movement and shape of the hand.

2.   As a system in Claim 1, proposed is a machine learning based system to translate sign language using Natural Language Processing. Gathered data is trained using Convolution Neural Networks to map the text to the hand movements.

3.   As a system in Claim 2, Convolution Neural Networks are a capable tool to capture numerous photos, learn and classify according to the category and translate the same using Natural Language Processing. It performs mapping of alphabets to 26 hand signals including delete and space sign. Featured maps are subject to alternate convolution and sub sampling to map to a fully connected output. The trained data from pooling layers are filtered and are connected to corresponding signs in sign language.

, Description:4. Description:

Field of Invention:

It is learnt from the literature that there are nearly 70 million deaf people around the globe (according to the data from World Federation of the Deaf (WFD)). Sign Langua

<div align="center">View Application Status</div>

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