Final Year Project Report

Project Name

English to Pakistan sign language - machine translation

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Dedication

We commit our work to the hard of hearing group everywhere throughout the globe with the goal that they get to be equivalent to ordinary people. In this exploration work we are principally worried with taking care of day by day life correspondence issues confronted by listening to hindered people. We are doing this venture as a serving to humankind and hard of hearing group as Sadqa-e-Jaaria.

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Final Approval

Panel of Examiners

1) **Head of Department** _____
   Department of Computer Science
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2) **Advisor** _____
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Acknowledgment

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Abstract

In this thesis a Text to Pakistan Sign Language Automation System has been proposed. To conquer any hindrance between deaf and an ordinary individual, we need to think of a framework which can make an interpretation of one dialect to another. Till now interpreters were doing this work for us however now we are going to mechanize it as a result of constrained assets. Keeping in perspective the difference of sentence structure, there is a need to study Pakistan Sign Language's sentence structure with the goal that we could make an interpretation of as per the PSL linguistic use. Without linguistic use, sentences can't pass on their appropriate implications. In the wake of archiving the punctuation we now need to mechanize the capacity of changing over English sentence into its Pakistan Sign Language proportional sentence. For this we have proposed a system which takes an English sentence as an input and will produce its comparable Pakistan Sign Language's sentence. Our proposed framework uses a few tools which parse the offered sentence to give English language lexicons along with their parts of speech and dependency tags, in the form of a tree. The yielded tree, alongside our documented sentence structure is passed to our proposed parser which then change the given tree hubs in light of those linguistic use rules. Last but not the least a PSL sentence is created from the modified tree.

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Introduction

Background

A language is mod of communication among human beings. There exists numerous languages for human being to interact with each other. These languages can be written or spoken but among these languages, there is a special kind of language which is neither written nor spoken. This is known as Sign Language. It is a visual language which means it is gestured language, it uses signs and gestures to communicate. Pakistan, with the population of 130.58 million, suffers from about 2.49% of disability out of which 7.40% are impaired of hearing. According to World Health Organization the commonness of disability is 10% which makes Pakistan seem as if they have very fewer people suffering from any kind of disability but in fact most of the parents deny the presence of disability among their children or conceal the fact that their children are disabled.