

FINAL YEAR PROJECT  
PROJECT NAME

**PAKISTAN SIGN LANGUAGE  
TEXT TO ANIMATION**



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## DEDICATION

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It is our genuine gratefulness and warmest regard that we dedicate this work to the deaf community and the corporations that would be taking an effort in further bringing this work to life. In addition, this is for all the teachers, students, interpreters and research professors who could understand our workings and make the best of it.

# FINAL APPROVAL

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## Panel of Examiners

- **Head of Department** \_\_\_\_\_  
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## ABSTRACT

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Sign language is a visual gesture language. Deaf people use sign language as their main source for communication. They use their hands, face and arms for conveying thoughts and meanings. Sign language is not having any written form and generating signs using video approach is very expensive, so, sign animation is the best solution. An automated system will be implemented in which words and phrases will be taken as the input and then translated onto our own made notation system, which will be able to identify the language pattern of the deaf community. Before that, a layer would have been imposed for the coordinates of the gesture, which once identified by our notation system will be displayed by the virtual human through animations.

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## DEFINITIONS AND ACRONYMS

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PSL	Pakistan Sign Language
ISL	Indian Sign Language
BSL	British Sign Language
HamNoSys	Hamburg Notation System
SiGML	Signing Gesture Mark up Language
MF	Manual Features
NMF	Non Manual Features
MT	Machine Translation

# 1 INTRODUCTION

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## **1.1 Problem Overview**

Every person follows a language through which he can communicate with other persons. However, there are communities in our society with deformity who are unable to speak and communicate with others. These people do not understand the languages that are commonly spoken by people such as English. Therefore, the deaf community uses Sign Language in order to communicate with the society and each other. In order to facilitate communication between deaf and hearing people, sign language interpreters are often used. Such activities involve considerable effort on the part of the interpreter, since sign languages are distinct natural languages with their own syntax, different from any spoken language.