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Audio to sign language translation

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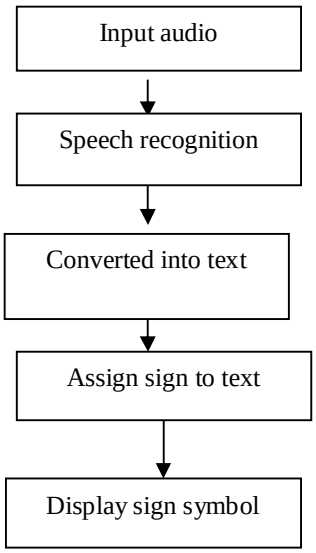
Abstract: Sign language is a visual language that is used by deaf and dumb people for communication. It is achieved by simultaneously combining hand shapes, orientation and movement of the hands, arms or body, and facial expressions. So this topic is based on converting the text or speech using text to speech api.for that Natural Language processing is used for breakdown of text into smaller understandable parts, then assign sign symbol to text using sign dictionary.
Keywords: Indian sign language, speech recognition.

I. INTRODUCTION

Sign language is common language that used deaf and dump people for communication. But deaf and dump people communicate with normal people or vice versa then so many problems are occur. In the world there are so many sign languages are present. There are No Fixed sign language for everywhere , each and every country have their own sign languages and according to that different rules are defined .

II. METHODOLOGY

Deaf and dump people understands only sign language but when they communicate with other people i.e. non deaf then it need an interpreter .so this system is designed to avoid that dependency .



So in this architecture user give the audio input into computer.then this audio input is passed to speech recognition. speech recognition converts that audio into small understandable pat of text. speech recognition used different technology to break down the audio into text.
Then system assign sign symbol to that small part of text using Indian sign language. when sign are assign it will display the sign symbol to receiver.

III. RESULTS

the system will give accurate results but in some cases the result might be wrong. If user give the input in different languages like Hindi, so that to avoid that problem some changes are required .in this system user give the input as audio and system will convert that audio into sign language which understands by deaf and dump people.

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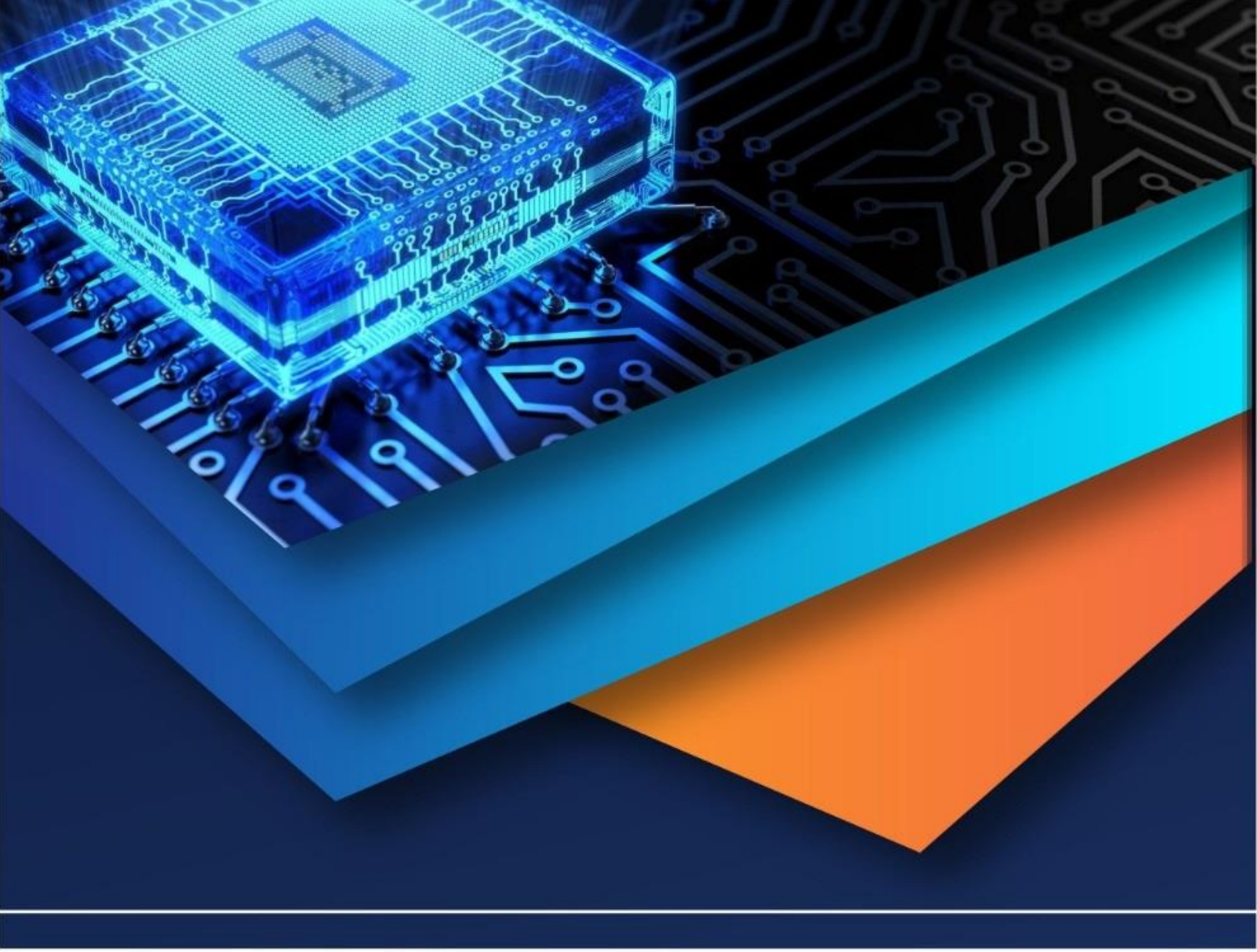
IV. CONCLUSION

Deaf and dump people understand sign language only but when normal (non deaf) people wants to communicate with deaf and dump peoples then they have so many problems are faced. So this system is works as bridge between normal people and deaf peoples, it converts the audio or speech into sign language which is understandable by deaf and dump peoples.

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