

# Survey of “Document Recommendation Using ASR”

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**Abstract-** This paper is basically for human voice recognition for document recommendation and what problem we faced for document recommendation system. The system is known as automatic speech reorganization. The previous we used the written query for information gathering. The automatic speech recognition machine is take input as human voice then it converts it to text. There are some methodologies used for this which will be discussed in this paper or document . The machine is actually worked as per voice given except that what voice it get from user. The system will give sentence as per human speak .The spoken words are converted into text query by use of ASR machine. The speech signals are given to system the training data .the automatic speech reorganization is worked on the acoustic model and pronunciation model.

**Index Terms-** Automatic Speech Recognition(ASR), Document Recommendation, Spoken words, Voice

## I. INTRODUCTION

Speech is used for communication media .it is used for any message passing which is likewise as emotional, regional speech that mean its is any type of speech This all information are in complicated form then also the its is human are recognize it efficiently. This paper motive is that to make system which is used to recognize speech and convert into text form. The system is known as automatic speech recognition. The many research are going for this recognize speech .this will be relate to linguistic message. The speech reorganization are used in broadcasting television as application. The thing is that the information is not straightforward so we have to perform some

process to make it in required .except all this we introduce the system which is working in all environmental factor are affecting on it then also it perform task govern to it .the training data set are used. For meeting rooms someone does not one of topic which is spoken by speaker so he need to search for document about particular topic so for that voice search engine is use. The voice search engine use ASR.

## II. LITERATURE SURVEY

A. “Automatic speech recognition: From beginning to the Portuguese languages”

Author: Andre adami

This paper is overview of the ASR system.It also represents current technique is used for making best ASR system.

B. “Automatic Speech Recognition and its application to information extraction”

Author: Sadaoki Furui

This paper is describe the application of ASR and how it will helpful in information extraction.

C. “Re-ranking ASR output for spoken sentences retrieval”

Author: Harksoo kim, yeongkil song

This paper is overview of how to make ranking to the ASR output

## III. RESEARCH ELABORATIONS

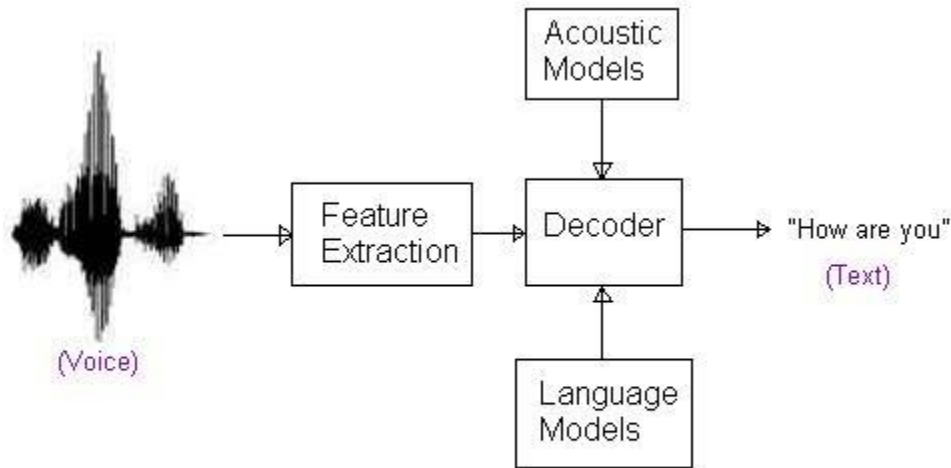


**Figure 1: ASR Used for document recommendation**

The system architecture shows how ASR is used for referring particular document. Speaker speak some topic through mike this voice give input to the ASR then ASR convert voice to text format. The ASR create sentences from voice this sentences used as query for searching document. But we have to go through the websites for particular document.

Analog speech is converted into digitize speech by using speech digitizer .then this digitized is processed by using digital signal processing. Features of speech depending on ascent , background noise and pronunciations. Then the extraction of speech is done in terms of linear prediction coefficient and energy.

**A. AUTOMATIC SPEECH RECONGNIZATION (ASR)**



**Figure 2:ASR**

**a. Feature Extraction**

Speech recording is sample of vocabulary of word which is collection of various speaker. Then it is converted into digital form by using sampling .it means speech signals are recorded at a normal interval of time, at the time of quantization, noise elimination is done from the given data.

**b. Decoding**

It means conversion of difficult language to easier one form. A decoder perform very important task of decision making on information covered by the acoustic model and language model.

Decoder finds accurate word from voice with the help of knowledge base model.

**c. Acoustic Model**

It means science of the sound this are produce without electrical amplification. Acoustic model contains two types such as word model and phoneme model. Word model contains the data from the given sentences. Phoneme means indivisible unit of sound i.e. abstraction of physical speech Sound. it identifies the sound by the way they are produced.

#### d. Language model

The language model are used to guide the search word. There are different types of language model following are:

- uniform model: it gives equal probability of occurrence to every word .
- stochastic model: it gives probability on preceding word.
- context free grammar: it access which type of sentence to be used to encoded.

#### e. Pronunciation Modelling

In this modeling it compared the symbol generated by acoustic model the word present in the dictionary. This is useful for understandings the same word with different punctuations spoken by two different person.

#### B. Web searching

Output of ASR is given to the web search engine. Web search then produce the different website for the documentation.

#### C. Documents

Different web sites having different document in different format like audio, text and video. We have to download that document for recommendation.

### IV. RESULT/FINDING

- A. Classification of important and stops words are not done in ASR.
- B. For searching document ASR produce full sentences not particular keyword.
- C. In meeting rooms for document recommendation require internet to search. and it require more time to search document.
- D. Require more time to find exact document and require internet access.

### V. CONCLUSION

Speech reorganization is quite difficult to deal with problem. We have attempted in this paper to review what problem is faced using ASR for document recommendation. We observe that for recommending document ASR is not fulfilling the requirement which is used in the conversion or the meeting. So we need to apply technique on ASR output for document recommendation system and it reduce time to get particular document.

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