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REVIEW ARTICLE

# Organized Text Structure System for Android Mobile Phone Users

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## ABSTRACT

Mobile phone user's in world is distribution fast and gone through immense changes due to new development and modernization in mobile technology. This research paper based on evaluates voice vs. keypad as a means for entry and editing of texts. An essential innovation in SMS technology recently is the speech acknowledgment machinery that can convert voice messages into text messages. The messages are voice, or speech type. The speech message to text converter is developed to send SMS.

**Key words:** Hidden Markov Model (HMM), HMM-based recognition, Short Message Service (SMS), Speech Acquisition.

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## INTRODUCTION

The communication into manuscript conversion is developed for the SMS application; this system will use recognition machinery which converts character of voice messages into wording messages. Android is collection of software packages of mobile strategy which has an os, and center application. In android platform by using java programming language to develop our own applications. Speech achievement and speech sample are obtained from the speaker in actual time and store in memory for pre-processing. Speech achievement require voice recorder in mobile phone which has correct extension to accept the influence speech signal, sample it, and convert it into digital speech. Generally, pre-processing involve captivating the speech sample as input, jamming the samples into frame, and persistent a sole mold for each sample. The scheme checks the frame for influence action using endpoint recognition and energy brink calculation. Space and time complexity is much essential because of the short memory provided by the mobile system. There is no disbelief that more mobile phone users use short message service (SMS) instead of making voice calls. In categorize to convince the requests and demands of users, mobile phone manufacturer are continuously adapt and innovating to make sure that they can carry on in this aggressive market. Significant originality in SMS technology recently is the communication acknowledgment machinery that can convert voice messages into text messages. In additional expressions, messages can be voice/speech typed. At present, voice messages can single be changed into text messages in the form of normal/standard text using fully spelled words. Text exchange is from 1970s someplace the initial experimentation of phoneme- to-grapheme conversion, this exchange consists of segmentation of phoneme string into word. This job is another time complete to stenotype-to-grapheme transfer. Voice massage is gradually and little by little sinking the importance of text massaging because it is safer to massage on the moment of cooking and driving. This paper introduces an idea about the talking to manuscript exchange for SMS application [6].

## RELATED WORK

Extract manuscript character as of ordinary outlook metaphors is a challenging problem due to differences in text style, typeset, amount, orientation, arrangement and multipart backdrop. The text data present in images and video contain assured useful information for pleased-base information indexing and retrieval, sign translation and intelligent driving support. In picture transcript taking out, contiguous quality grouping and character stroke orientation method perform to explore for picture region of text string. A method of scene text extraction from detected text regions, which is compatible with android mobile applications and extracted text, is converted into audio. This system reads the text information in the objects and informs blind users of the extracted text information. It detects text area from natural scene image and extracts text information from the detected text regions. In image text detection, analysis of colour decomposition and horizontal alignment is performed to search for image regions of text strings [7]. Speech machinery is able to use symphony, transcript, transaction and collaboration dialog based on particular domain [1]. Natural Language Understanding and speech recognition are two autonomous technologies. When these two technologies can be combined, it provides authoritative human-computer


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interaction (HCI). Natural language appreciative has been a dynamic area research for decades. Since then, the field of Artificial Intelligence (AI) has evolved researchers are borrow thoughts beginning the field of math, linguistics, psychology and philosophy. The research of long decades it can be derived that the conventional computer programs and procedural paradigms were not suited for the challenge at hand. By technical paradigms referring to task oriented programming, such as a program written in a 3rd generation language like COBOL, FORTRAN, or C [2]. Entirely special languages and tackle had to be formed to help development of conversational systems, such as Lisp (based on Lambda Calculus), Prolog (based on predicate calculus), Small Talk (based on objects), semantic net, frame, etc. Secondly, a chatterbox is planned to replicate an intelligent exchange with human via speech or text. The technology, used by the chatterbox, to generate response is simply finding a keyword from the input and get the reply from database with matching keywords or wording patterns [3]. Figure shows the well-designed diagram of a very general TTS synthesizer. A simple text is process by Natural language processing software with linguistic knowledge and some logical inferences. Then the text goes to make some phonetic transcription with desired intonation and rhymes [2]. Then it passes through the Digital Signal processing to transform that symbolic information into speech with the help of mathematical models, algorithms and computations.

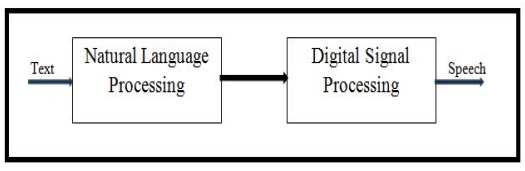


**Fig. 1: Text To Speech Synthesizer**

Most of the time text-to-speech synthesizer costs the user to say some specific and restricted text to pronounce. Sometimes the quality of the "emotional dynamics" also comes into the play as the outputs are not as comparable to human speech performances. Although giving less satisfactory output, these synthesizers solve the problem in real time with limited memory requirements.

## I. ANALYSIS OF PROBLEM

- The system acquires speech through a voice recorder and processes the sampled speech to recognize the uttered text.
- Speech-to-text arrangement can pick up system ease of use by providing data entry options for blind, deaf, or physically handicapped users.
- Many people will have to use their cell phones while driving even though it is illegal to do so. Road accidents may occur because drivers that using cell phones definitely cannot fully concentrate on the driving.
- A significant improvement in SMS technology recently is the speech recognition technology that can convert voice messages into text messages.
- A such a system would enable deaf users to communicate with each other
- Enable user to send massages without use of keypad to type massage in the form of original fully spelled world.
- It is a standalone system for converting speech to text without using a PC for recognition.

## PROPOSED WORK

The proposed work converts speech into text. In this manuscript we have provided speech to text conversion system. The elements of speech to text conversion system are-


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- Speech Acquisition
- Speech to text conversion
- SMS transmission

These structures allow us to provide our voice as input and generate text as an output. Systems use "training" wherever a personage spokeswoman read section of text. These systems analyse the people particular influence and use it to fine melody the detection of that person's tongue, resultant in more perfect transcript. The speech to text conversion system is the ability of smart phone to identify the words which is in the spoken language and translation of it into the readable form that is in the form of text.

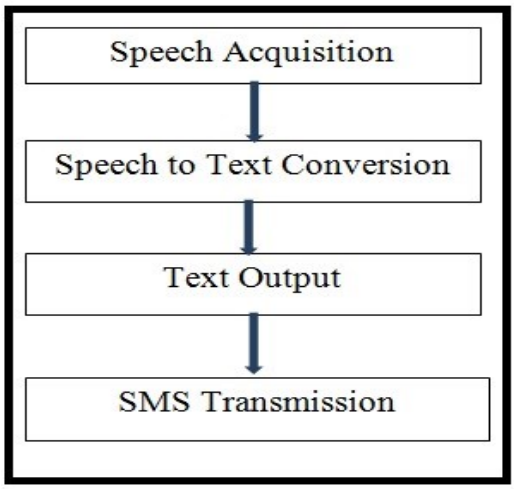


**Fig.2: Elements of speech to text conversion system**

## ACKNOWLEDGMENT

In this paper we have discussed speech to text conversion system. The speech to text conversion system is the ability of Smartphone to identify the words which is in the spoken language and translation it into the readable form which is in the form of text.

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