

Artificial Intelligence Bigdata MOBLET : A Review

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ABSTRACT

Artificial Intelligence is the field studies the synthesis & analysis of computational agents that act intelligently. This paper is described about the creation of Artificial Intelligence Moblet using novelty OS (Jyotis) by controlling the system through voice and the nature of intelligence. A measurement framework of intelligent capability of humans and systems is comparatively studied in the forms of intelligent quotient, intelligent equivalence, and intelligent metrics. As we give voice command to the system, by using Brute Force and Greedy Algorithm getting responses faster than human. On the basis of those algorithms, implementing voice reorganization into the system. Accessing the stored data from the system and retrieving from the data through voice command and also from our own server, but not retrieve using search engines such as Google, Yahoo, Bing and so on. By using Cloud computing (on-demand computing) we can import and export data to Hadoop using Sqoop, is a kind of Internet-based computing that provides shared processing resources and data to computers and other devices on-demand. Access to a shared pool of configurable computing resources connects through a cloud server by using SSH and the host name. This moblet has as separate OS name Jyotis (linux platform) it can also capable of running .apk files and .exe file(through wine).I have included the .apk package to my OS. Which is user friendly in nature?
Keywords: AI; brain science Algorithm; intelligent quotient; Big Data; Cloud Computing, System model, Jyotis, Design, HDFS, Map Reduce, Modes.

I. INTRODUCTION

Artificial Intelligence is a branch of computer science concerned with making computers behave like humans. The term was introduced in 1956 by John McCarthy at the Massachusetts Institute of Technology. Generally, we are expecting quick access of data while using the System. Instead of typing the words, giving voice command to the System interactively. We are communicating by means of typing the words that consume more time than voice. But this System interact based on voice recognition overcome the typing. For communication purpose we give the input in Tamil(Typing), display that word in English with the help of dictionary predefining the words (contains Hindi, Tamil, and English).And also this System used to convert the Tamil word into English or Hindi by switching the translator mode that briefly explained below. This System has to maintain large set of data (BIG DATA). Apache Hadoop is an excellent

framework for processing, storing and analyzing large volumes of unstructured data to our system. We create a link between cloud and Hadoop Server by means of IBM infoSphere Technology for accessing the global data to our system. This system consumes more battery so we implement Milliamp battery and Photovoltaics (PV) panel to withstand the battery life. And this Moblet has several features described below.

II. METHODS AND MATERIAL

A. Existing Model

"Google voice search" On October 30,2012, Google released a new Google Search App for iOS and later introduced on Android Jelly Bean. The main drawback of google voice Search need internet to retrieve the data.

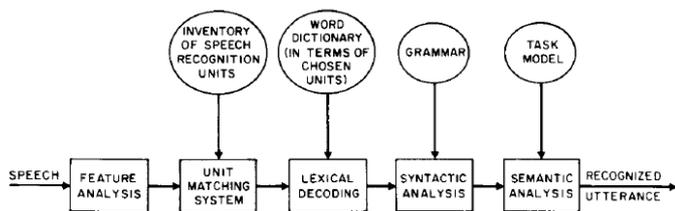
"Windows Cortana" On May 26, 2015, Windows announced the Cortana for windows 10. Cortana is

accessed through the search button in the task bar. This Cortana also need a windows login id (Hotmail, Outlook) to access it via internet to get the data through voice search.

“iOS Siri” Siri was originally introduced as an iOS application available in the App Store by Siri Inc., which was acquired by Apple on April 28, 2010. Had announced that their software would be available for BlackBerry and for phones running Android, but all development efforts for non-Apple platforms were cancelled after the acquisition by Apple

B. Proposed System:

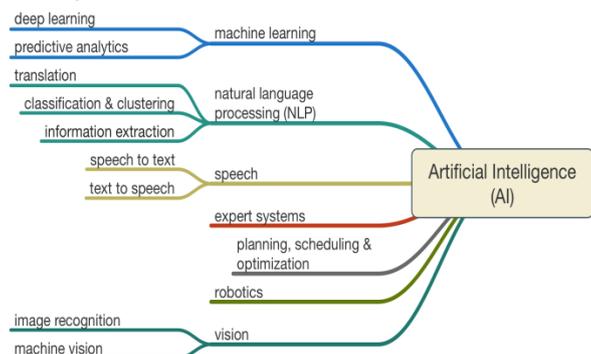
It is proposed in our Jyotis system and also applicable to super computers for controlling the system through voice.



C. System Model

This System overcomes the entire three platforms by searching the data not by means of any search engine like Google, Bing, and Yahoo. Data can be retrieved from the system storage. User can access internet through our own cloud by link to Hadoop server to access the Global data and Website.

Our system is your companion, with the ability to perform task for you rather than being a mere utility to perform work. Our system will learn from us enhancing its own knowledge and unique personality. Interact with our system the same way you interact with other people through voice.



D. Algorithm and Equations

- Step 1 : User gives the voice input “Hello”
- Step 2 : The system recognizes the admin voice. If matches proceed to step 3 else skip to step 9
- Step 3 : The System response to the user through voice as “Yes Sir”
- Step 4 : If user need some information, the system first check whether internet connection is ON or OFF
- Step 5 : If the internet is off, its searches in the secondary storage device.
- Step 6 : Else it searches in the internet to display the data to the user favor.
- Step 7 : Display the data on the screen
- Step 8 : System wait for 10sec to get any command If system did not get any response step 9
- Step 9 : Stop

E. Storage Management

Big data: Big data is a buzzword, or catch-phrase, meaning a massive volume of both structured and unstructured data that is so large it is difficult to process using traditional database and software techniques.

Cloud Computing:

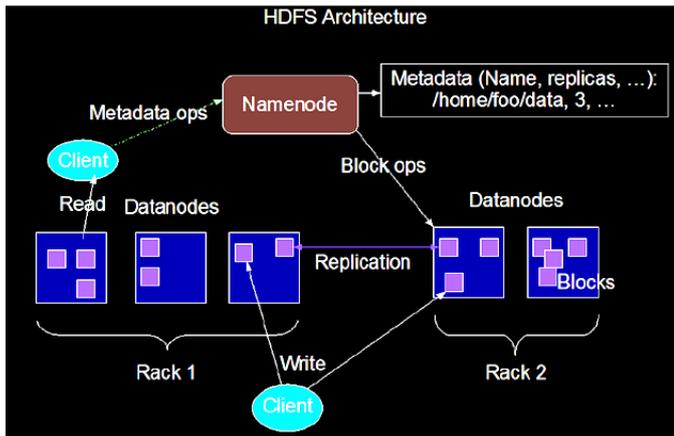
Accessing the data through cloud with the help of IBM InfoSphere Technology. Creating a link to the cloud as well as we can import and export data in to Hadoop by sqoop.

Hadoop:

Hadoop is an open-source framework that allows to store and process big data in a distributed environment across clusters of computers using simple programming models. It is designed to scale up from single servers to thousands of machines, each offering local computation and storage. In Hadoop we have two components

1. Distributed file system
2. MapReduce Engine

In Hadoop Distributed File System The HDFS splits large data files into chunks that are managed by different nodes in the cluster. Each chunk is replicated across several nodes to address single node outage or fencing scenarios.

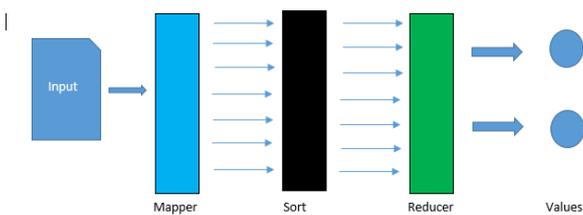


MapReduce:

MapReduce is a processing technique and a program model for distributed computing based on java. The **MapReduce** algorithm contains two important tasks, namely Map and Reduce.

Map Stage: The map or mapper’s job is to process the input data. Generally, the input data is in the form of file or directory and is stored in the Hadoop file system (HDFS). The input file is passed to the mapper function line by line. The mapper processes the data and creates several small chunks of data.

Reduce Stage: This stage is the combination of the **Shuffle** stage and the **Reduce** stage. The Reducer’s job is to process the data that comes from the mapper. After processing, it produces a new set of output, which will be stored in the HDFS

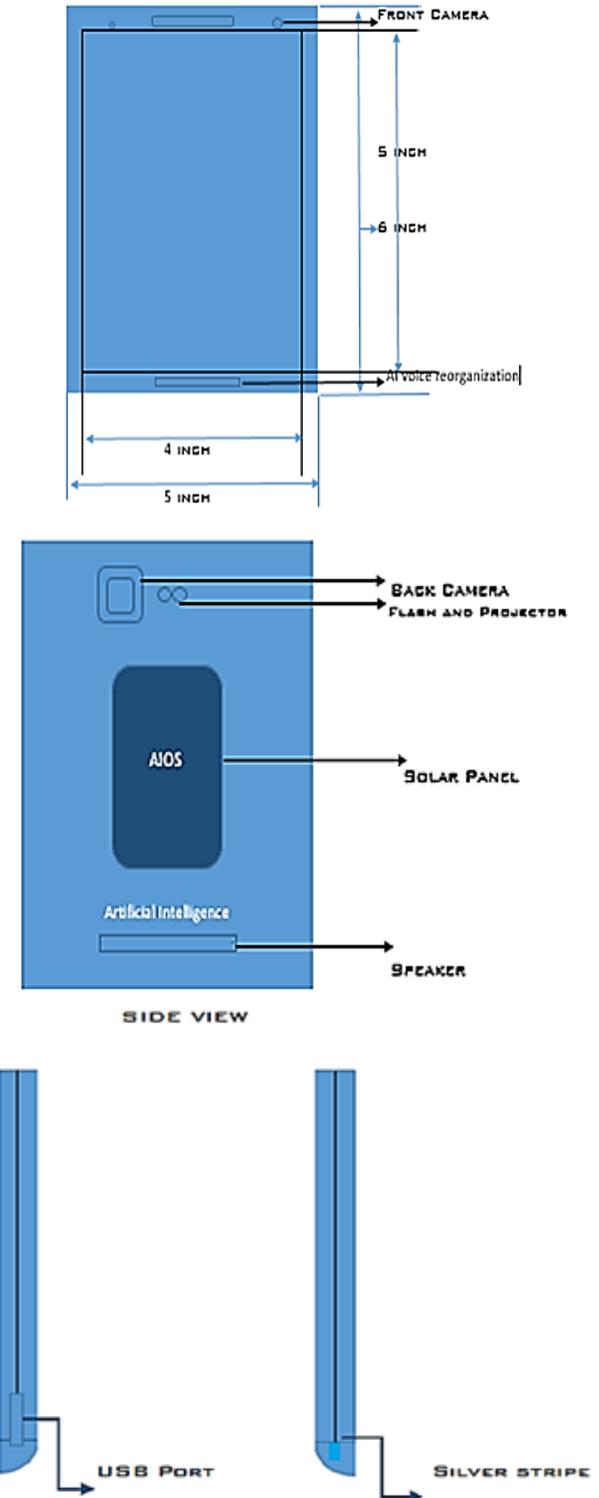


	INPUT	OUTPUT
MAP	<k1, v1>	list (<k2, v2>)
REDUCE	<k2, list(v2)>	list (<k3, v3>)

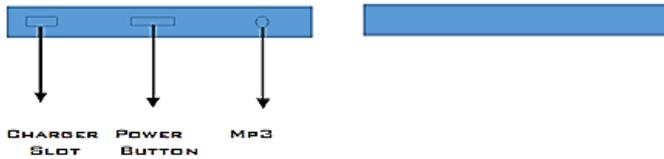
The key and the value classes should be in serialized manner by the framework and hence, need to implement the Writable interface. Additionally, the key classes have to implement the Writable-Comparable interface to

facilitatesorting by the framework. Input and Output types of a MapReduce job: (Input) <k1, v1> -> map -> <k2, v2>-> reduce -><k3, v3>(Output).

Moblet Architect:



TOP AND BOTTOM VIEW



Basic voice Commands to control the system:

Hello Jyotis
Unlock
Call
Open Internal memory
Open SD card
Open gallery
Open Message
Open Camera
Open Selfie
Open Browser
Open SD card Video
Open Downloads
Close All app
Close Internal memory
Close SD card
Close gallery
Close Message
Close Camera
Close Selfie
Close Browser
Commands can be added in "Command mode"

New Features Of Jyotis:

1. You can type word file through voice
2. Text in your favorite language for example: get the input in Tamil as "Yeppd ieruka" the system recognize the Tamil language display the Tamil word in English. For translation user can change to Translation mode
3. Photovoltaic for Long Battery life.
4. Convert the word file to PDF in single command
Change the format Word to PDF, Video to Mp3 etc.
5. Projector in Flash
6. USB Support
7. LIFI Technology
8. Cooling Pad

Modes of Jyotis Moblet

These modes are changed through voice command.as
Switch required mode as user needs

System Learning Mode:

System can learn from user through internet or by storing the content in a folder name "System learning mode" into USB drive. It recognizes the folder name automatically it updates the data and learns it.

User Learning Mode:

The AI System shows the best solution to the user by searching in internet and through storage. For example, we need to know about Wikipedia of Sachin Tendulkar then it shows the result only from Wikipedia.

Physical Fitness Mode:

In this mode we can know about how much calories we burn and eat. Gym fitness exercises Take care about the health condition Body weight, Fat content in our body that can also be measured.

Entertainment Mode:

Our main goal is to integrate the Mplayer with the SR system to control the functioning of a media file. The block diagram shown below depicts its functioning. In this mode we can watch movies, image stuffing, music, camera and lot more.

Gaming Mode:

In this mode we can play games. Graphics card plays a vital role

Communication Mode:

In this mode we can communicate with our friend's relatives through calling, messaging.

Travelling Mode:

In this mode we can know the current place where we are in. It keeps on updating our travelling place where ever we go. And also guide to reach the destination.

Format Changing Mode:

If user wants to convert Video to Mp3,By a single command

"Change Video to Mp3 format"

"Change Word to PDF Format"

"Change JPG to Img Format" etc..

IV. REFERENCES

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Cooking Mode:

In this mode it guides to make food all types of food making process is stored in memory. If any new dish comes in internet it automatically updates.

Aero Plane Mode:

In this mode used in aero plane.

Accounting Mode:

Business information are stored by used to the System. when even we need we can retrieve the data and update.

File Sharing Mode:

It share the data to the other device at the speed of 100mb/s.

Sleep Mode:

It suddenly changes to sleep mode. If the user gives the command “wakeup” then the System start acting normally.

Projector Mode:

Displays the content on the through flash device on the wall or on projector screen. Which is a new technology has arrived.

Power Saving Mode:

In power saving mode when the battery level reduces to 20% then it automatically saves the power we can use only three modes Such as communication mode User learning mode and Sleep mode in order to reduce the usage of battery. From 20%-1% it can withstand up to 3hrs.

Destruction Mode:

In this mode System receive the command like” Destruction mode” only from the admin then it alert us after 3 min it gets destroyed. We can control the destruction process by command” Stop Destruction”,

III. CONCLUSION

It is to be concluded that, Controlling the jyotis system through voice commands without internet; accessing the data from the storage and also from internet without search Engine (Google,Bing,Yahoo) through cloud we can import and export data into Hadoop by sqoop.