LITERATURE SURVEY

TITLE: Real-time communication system powered by AI for specially abled

Aurthor:D.Umahiya,R.Raghorte.

In this page,the design and implementation of digital assistance is discussed.the project is built using open source software modules with pycharm community backing which can accommodate any updates in the near future.the modular nature of the project makes it more flexible and easy to add additional features without disturbing current system functionalities.

Abstract: This paper illustrates the implementation of our proposed voice assistant that provides assistance to disabled personalities over the website. ARA-the voice assistant is a software agent that can interpret human speech and respond via synthesized voices. The most popular voice assistants which can all be found on smart phones and dedicated speakers. As voice assistants become more widely used, but have complex functionality and only open when we click the mic option, this will start on voice command, easier for the people who are blind or have cognitive disabilities. ARA will read out the content of the website and then using speech to text and text to speech modules along with selenium, our software can automate any website. The designed voice assistance connects with the intended applications to provide results that the user has demanded. The objective of this paper is to illustrate how voice assistants are used in everyday life with minimal efforts and to explore whether there is potential for making them accessible for people with disabilities.

Keywords: artificial intelligence, machine learning, voice assistants, speech recognition, cognitive disabilities

INTRODUCTION: Voice assistants have a very long history that dates back over 100 years, which is surprising since Siri, the first one that we are aware of, was only released ten years ago and now we can see AI at work every day in the form of virtual personal assistants, which are embedded in almost every smartphone today. It is no wonder that voice assistants are gaining popularity at an incredible rate, becoming more relevant to providing great, yet effortless customer service. The basic idea of taking an artificial voice assistant into the picture is that it is a voice robot, which is somewhat different from the natural human voice and reacts according to the command. It is no longer a human who learns to communicate with a machine, but a machine learns to communicate with a human, prospecting his actions, habits, behavior, and trying to become his personalized assistant. Worldwide, 15% of the population has some form of disability, of which 2-4% have significant difficulties with their functioning. The task of using a website can seem trivial to most people, but it can be extremely difficult for people with disabilities. As a result, we wanted to develop a way that would allow different types of people to access the internet in a unique way.

1. JARVIS,DIGITAL LIFE ASSISTANT'2013 KHOBRAGADE S.

ABSTRACT: The objective of this project is to create a personal assistant for Linux-based Software. Visual assistants such as Cortana for Windows and Siri for iOS serve as inspiration for Jarvis. It's intended to give a simple interface for carrying out a variety of actions based on exact instructions. Users can interact with the assistant by using voice commands or by using keyboard input. As a personal assistant, Jarvis assists the end user with daily activities such as regular human chat, search queries on google, Bing or yahoo, video search, retrieval images, live weather, word descriptions, search for tree description. Signalling health-based recommendations and reminding the user about planned events and activities. Machine learning is used to assess user statements or instructions in order to produce the best answer. Keywords: Linux Systems, Personal Assistant, Automation and Machine Learning

INTRODUCTION: Speech complements or replaces the use of mouse, keyboards, controllers, and body language as an effective and natural way forindividuals to engage with programmes. A handsfree, yet intuitive way to communicate with apps, speech allows people to produce and stay informed in a variety of situations where other visual connectors may not. Speech recognition is a very useful topic in many programs and environments in our daily lives. Often a speech impediment is a machine that understands people and their voice spoken in a certain way and can do something afterward. A different aspect of speech recognition is helping people with disabilities or other types of disabilities. To make their daily routine easier, voice control may be helpful. With their voice they could turn on / off the light switch or use other household appliances. This leads to a discussion about smart homes where these services can be made available to ordinary people and people with disabilities. With the information presented so far one question arises automatically: how is speech recognition performed? For information on how speech recognition problems can be addressed today, a review of some of the highlights of the study will be presented. Various researchers attempted to explore the core ideas of acousticphonetics in the 1950s, which led to the first attempts to create automatic speech recognition systems. In 1952, at Bell Laboratories, Davis, Biddulph, and Balashek developed a single-digit. single-system recognition system [12]. The system relies heavily on measuring spectral sound during each digital vowel region. Fororgie, which was created at MIT Lincoln Laboratories, attempted a second attempt in 1959. Ten vowels embedded in / b / -vowel- / t / are recognized independently of the platform [13]. In the 1970's a speech recognition study acquired a number of gemstones. Initially the location of the distinctive name recognition or incomplete pronunciation became a practical and useful technology based on the basic research of Velichko and Zagoruyko in Russia, Sakoe and Itakura in the United States, as well as Chiba in Japan. Russian studies helped to improve the use of pattern recognition concepts in speech recognition; Japanese research has shown how effective planning methods can be used effectively; and Itakura research has shown that the ideas for predicting linear code (LPC).

3.AI BASED VOICE ASSISTANT USING PYTHON 2019 SHENDE.D,UMAHIYA.R

Abstract:Artificial intelligence technologies are beginning to be actively used in human life, this is facilitated by the appearance and wide dissemination of the Internet of Things (IOT). Autonomous devices are becoming smarter in their way to interact with both a human and themselves. New capacities lead to creation of various systems for integration of smart things into Social Networks of the Internet of Things. One of the relevant trends in artificial intelligence is the technology of recognizing the natural language of a human. New insights in this topic can lead to new means of natural human-machine interaction, in which the machine would learn how to understand human's language, adjusting and interacting in it. One of such tools is voice assistant, which can be integrated into many other intelligent systems. In this paper, the principles of the functioning of voice assistants are described, its main shortcomings and limitations are given. The method of creating a local voice assistant without using cloud services is described, which allows to significantly expand the applicability of such devices in the future.

INTRODUCTION: Today the development of artificial intelligence (AI) systems that are able to organize a natural human-machine interaction (through voice, communication, gestures, facial expressions, etc.) are gaining in popularity. One of the most studied and popular was the direction of interaction, based on the understanding of the machine by the machine of the natural human language. It is no longer a human learns to communicate with a machine, but a machine learns to communicate with a human, exploring his actions, habits, behavior and trying to become his personalized assistant. The work on creating and improving such personalized assistants has been going on for a long time. These systems are constantly improving and improving, go beyond personal computers and have already firmly established themselves in various mobile devices and gadgets. One of the most popular voice assistants are Siri, from Apple, Amazon Echo, which responds to the name of Alex from Amazon, Cortana. Microsoft, Google Assistant from Google, and the recently appeared intelligent assistant under the name "AIVA". Section I, II presents a brief introduction to the architecture and construction of voice assistants. Section III provides proposed plan of work. Section IV provides methodology of the work of a voice assistant AIVA. Section V describes the test results of the voice assistant. Section VI and VII describes the conclusion and future scope of an assistant using various artificial intelligent algorithms, and gives a comparative evaluation of the learning ability of algorithms. The main goal of this work is to build a local voice assistant that does the work of human and the daily task that a human needed to do in daily life. AIVA (2018) aimed at developing a voice-controlled personal assistant which is doing many things such as to search the Internet. It has some new features like posting comments on the social media websites such as Facebook, Twitter, etc. By just few simple commands. You can also know the weather around you and can get the climate conditions in your region. It can open and launch web-applications and the local storage of the user computer.

4. RESEARCH PAPER ON DESKTOP VOICE ASSISTANT 2022 DHANRAJ K.V.KRIPLANI.

Abstract:- The main goal of Artificial intelligence (AI) is the realization of natural dialogue between humans and machines. There are many IT companies have used the dialogue systems technology to establish various kinds of Virtual Personal Assistants (VPAs) based on their applications and areas for increasing interaction between human and machine, such as Microsoft's Cortana, Apple's Siri, Amazon Alexa, Google Assistant. As like Microsoft cortana we have created our own virtual personal assistant only for windows using python which is able to access on any windows explorer such as windows 7,8,10. We use python as a programming language because it have a major libraries which is use to execute commands. By using python installer packages our personal virtual assistant recognize the user voice and process on it. Voice assistants are the great innovation in the field of AI that can change the way of living of the people in a different manner. The voice assistant was first introduced on smartphones and after the popularity it got. It was widely accepted by all. Initially, the voice assistant was mostly being used in smartphones and laptops but now it is also coming as home automation and smart speakers. Many devices are becoming smarter in their own way to interact with human in an easy language. The Desktop based voice assistant are the programs that can recognize human voices and can respond via integrated voice system. This paper will define the working of a voice assistants, their main problems and limitations. In this paper it is described that the method of creating a voice assistant without using cloud services, which will allow the expansion of such devices in the future.

Introduction:- Virtual assistant is used to run machine like laptop or PC's on your own command. Virtual assistant is an application program that understands natural language and voice commands to complete tasks for the users. The Users can ask their assistants' questions, control home automation devices, and media playback viavoice,andmanageotherbasictaskssuchasemail, to-do lists, open or close any application, send messages to anyone on Whatsapp etc. with verbal commands only. Some other types of Voice Assistantare:

- IntelligentPersonalAssistant
- AutomatedPersonalAssistant
- VirtualDigitalAssistants
- Chat bot

Nowadays virtual assistant is very useful to human. It makes human life easier like operate PC's or laptop on only voice command. Virtual assistant is a less time consuming. By using virtual assistant we saves our time and contribute in other works. Virtual assistants are typically cloud-based program that requires internet connected devices. Virtual assistant is the flexibility to contract for just the services they need. For creating virtual assistant for your computer go from basics python. Virtual assistants are task-oriented. Virtual assistant's ability to understand and perform requests. Virtual assistants is a software that understands verbal and written commands and completes task assigned by clients. Virtual assistants are able to interpret human speech and respond via synthesized voices. There are several voice assistants in market like Siri for apple TV remote, Google Assistant for pixel XL smartphones, Alexa as a smart speaker which is developed by using Raspberry Pi, Microsoft Cortana for windows 10. As like this all virtual assistants we also created a virtual assistant

5.VIRTUAL ASSISTANT USING PYTHON 2021 DAMARLA.K

Abstract: Recognizing the speech isthe process for Recognizing speechof mortal by computer and producing affair by well written sequence format. During these days operations which are grounded on speech recognition are entering enormous fashion ability because of using Natural Language Processing(NLP) ways. To help physically impaired people we came up with an idea of erecting a voice adjunct with continues commerce point. For this, we're using speech API module then. In Our System, we've substantially three modules. One is user module, other is speech API module and the final bone is system module. Using this interface, every stoner can interactwith system to complete their workshop related to Google hunt and document medication. Then, the main advantage is stoner can interact with the system continuously until he or she wants to exit.

Key Words: Speech Recognition,NLP,, Speech toText,TexttoSpeech, Voice Assistant, Speech API.

INTRODUCTION: Consciously or unconsciously, personal assistants are now an integral part of our lives. This is because language plays a huge role in people's lives, as well as some potential applications. This is because of all the functionality and ease of use they offer. Speech recognition is one of the main aspects of NLP. This can be done using Python. Personal assistants are also capable of automating mundane tasks, allowing users to focus on the things that matter most to them. Personal assistants provide functions such as making calls, writing messages, taking pictures, saving to-dos on the go, surfing the web, and more. Therefore, utilizing these capabilities of virtual assistants can save individuals a lot of time and effort. It is important to focus more on what is most important to a person, be it personal orprofessional work. People typically spend more time on routine tasks and can be automated with these types of personal assistant. When someone is working in an environment the environment, he/she is not familiar with, it is often difficult tofind the application they need, such as a browser, IDE or other software. Most of the time, they waste. Time just looking for apps. This results in unnecessary time loss.Therefore, voice-controlled personal assistants help automate this process. Users are expected to simply issue voice commands and the assistant will handle the rest. The paper proposes a voice-activated personal assistant, which would allow a person to use voice commands to get things done, andalso s-have a lot of time. This voice-enabled personal assistantcan be implemented using technologies such as speech-to-text and text-to-speech, or it can be integrated with other functions as needed. 25% of Searches on the Windows 10 taskbar are voice-driven- and that's from desktop, not even mobile! According to HubSpot, 19% use Siri at last daily ,37% use Siri monthly, 23% use Microsoft Cortana monthly , and 19% use Amazon's Alexamonthly, and 19% use Amazon's Alexa monthly[1] 60 % of smartphone users started using Voice search in the past 12- 18 months – Search Engine Land 2015-2020, about 30% of Searches will be Screenless- thanks to Google Technologies such as Assistant for Home , Amazon Alexa for Echo, and Chatbots(Source: ComScore) According to the Global WebIndex, nearly 10% of the online population, or 325.8 million people , used voice in the past month. to ship 10,00,00 Google. Home devices in 2022 Nearly 50% now use voice Search whenresearching products – social media Today.

6.EMPOWERING PEOPLE WITH DISABILITIES THROUGH AI 2018 SMITH.B,SHUM.H

Abstract:In this paper, we present the concept of AI Readiness, along with a framework for developing AI Readiness training. 'AI Readiness' can be framed as *a contextualised way of helping people to understand AI*, in particular, data-driven AI. The nature of AI Readiness training is not the same as merely learning about AI. Rather, AI Readiness recognises the diversity of the professions, workplaces and sectors for whom AI has a potential impact. For example, AI Readiness for lawyers may be based on the same principles as AI Readiness for Educators. However, the details will be contextualised differently. AI Readiness recognises that such contextualisation is not an option: it is essential due to the multiple intricacies, sensitivities and variations between different sectors and their settings, which all impact the application of AI. To embrace such contextualisation, AI Readiness needs to be an active, participatory training process and aims to empower people to be more able to leverage AI to meet their needs.

The text that follows focuses on AI Readiness within the Education and Training sector and starts with a discussion of the current state of AI within education and training, and the need for AI Readiness. We then problematize the concept of AI Readiness, why AI Readiness is needed, and what it means. We expand upon the nature of AI Readiness through a discussion of the difference between human and Artificial Intelligence, before presenting a 7-step framework for helping people to become AI Ready. Finally, we use an example of AI Readiness in action within Higher Education to exemplify AI Readiness.

Introduction and background: the current state of AI within education and training.The general idea of "artificial" intelligence or a humanly constructed living being goes back at least to the Greeks and is loaded with both wonder and dread (for more recent versions of this theme, see e.g., Meyrink, 1915; Shelley, 1818). As an area of scientific research, Artificial Intelligence (AI) is now about 65 years old. Over the last half-century or so the reputation of AI has changed dramatically from being an arcane academic activity, via being ridiculed as a pipedream, to now being both over-estimated and under-estimated in its power. There are numerous definitions of AI and none that are unanimously accepted within the AI research community. However, for the purposes of this paper, following the Oxford English Dictionary, we define AI simply as: "The capacity of computers or other machines to exhibit or simulate intelligent behaviour; the field of study concerned with this". AI's power is both overestimated and made scarier given the way that it is routinely portrayed in popular culture, such as in the film Ex Machina, and underestimated such as when one tries to interact with an uncomprehending chatbot on (say) a bank's website. The truth is somewhere between the two. However, whatever view we take about the power of AI, it is crystal clear that AI is changing the way we live and work (Posner & Fei Fei, 2020). It is ever more prolific in society and is gaining momentum in the education and training space as more products and services that use AI become available (Luckin, et al. 2019). There are an increasing number of AI applications available to education and training organisations and many companies that are extremely keen to sell to this sector. Some of these systems are based on sound research, but not all. This increasing adoption and availability of AI demonstrate the need for educators and trainers to understand a little more about how to distinguish worthwhile, well-designed, ethical AI, from those systems that are not all of these and sometimes not any of them. If we look at the long history (in AI terms) of AI systems for education and training, it is easy to see the complexity of the landscape facing both developers and educators. The concept of *AI Readiness* is a way to describe the transition that those working in education and their students need to make from not understanding what AI is and what AI can do, to being able to understand, in non-technical terms, what AI is capable of achieving. There may also be Educational Technology companies who could benefit from developing their AI Readiness, but our primary focus here is upon the educational community. AI education to date aims to enable people to learn how AI systems work in technical terms and it usually involves programming and building an AI application (see for example). This is not what the educational community needs.

7.DESKTOP VOICE ASSISTANT FOR VISUALLY IMPAIRED 2020 YADAV.A,SINGH.A

Abstract: A personal voice assistant is the software that can perform task and provide different services to the individual as per the individual's dictated commands. This is done through a synchronous process involving recognition of speech patterns and then, responding via synthetic speech. Through these assistants a user can automate tasks ranging from but not limited to mailing, tasks management and media playback. As the technology is developing day by day people are becoming more dependent on it, one of the mostly used platform is computer. We all want to make the use of these computers more comfortable, traditional way to give a command to the computer is through keyboard but a more convenient way is to input the command through voice. Giving input through voice is not only beneficial for the normal people but also for those who are visually impaired who are not able to give the input by using a keyboard. For this purpose, there is a need of a voice assistant which can not only take command through voice but also execute the desired instructions and give output either in the form of voice or any other means.

Keywords: Python script, speech recognition, voice assistant Abbreviation: API (Application program interface), NLP.

INTRODUCTION: The usage of virtual assistants is expanding rapidly after 2017, more and more products are coming into the market. Due to advancement in the technology many different features are being added in the mobile phone and desktops. To use them with more convenient and fun way we require a means of input which is faster and reliable at the same time. In our project we use voice command to input the data into the system for that the microphone is used which convert acoustic energy into electrical energy. After taking the input there is a requirement to understand the audio signal for this google API is used. Different companies like google, apple use different API's for this purpose. It is truly a feat that today, one can schedule meetings or send email merely through spoken commands These voice assistants work as your companion which performs your day by day task with minimum efforts and also help the user to function better by giving daily updates. It was after the recognition of importance of voice commands in day to day life that we have aimed to develop a personal assistant for desktop which will do every work from playing music to sending an Email. The development of voice assistants was started in 1962 at the Seattle world's fair where IBM presented a device called shoebox IBM that could recognize spoken digits and then return them back through igniting lamps labelled next to the digits 0-9. It had the ability to perceive a total of 16 words. Currently most of the voice assistances are developed for the mobile phones like google make voice assistance support for android mobiles, apple use Siri and amazon have Alexa these assistants used language processing to perform its task. another voice assistant is Cortana which is been developed by Microsoft and used on desktop. All of these voice assistants perform the same intended function – that is, voice initialized processing, and all of these developments have been a result of the same new age technology- Artificial intelligence. At the core of all these assistants is a simple synchronous cycle – Voice commands and hear responses. Sutar Shekhar, and various researchers have jointly come up with an application which implements most of the system functionalities through voice and they also included the feature of sending a message with their voice command to help those people who are visually impaired. They aim to continuously develop their application so as to m a finally have an engine which can also recognise different local languages like Bengali, and a number of dialects of prevalent Hindi. Miss. Priyanka V. Mhamunkar and others proposed a system which will let the

8.ARTIFICIAL INTELLIGENCE AND DISABILITY:TOO MUCH PROMISE,YET TOO LITTE SUBSTANCE 2020 PETER.S,SMITH.L

Abstract:

Much has been written about the potential of artificial intelligence (AI) to support, and even transform, the lives of disabled people. It is true that many advances have been made, ranging from robotic arms and other prosthetic limbs supported by AI, decision support tools to aid clinicians and the disabled themselves, and route planning software for those with visual impairment. Many individuals are benefiting from the use of such tools, improving our accessibility and changing lives. But what are the true limits of such tools? What are the ethics of allowing AI tools to suggest different courses of action, or aid in decision-making? And does AI offer too much promise for individuals? I have recently undergone a life changing accident which has left me severely disabled, and together with my daughter who is blind, we shall explore the day-to-day realities of how AI can support, and frustrate, disabled people. From this, we will draw some conclusions as to how AI software and technology might best be developed in the future.

Introduction:

The aim of this thought piece is to explore the interface between AI and disability, and the ethical dilemmas which this raises. To do so, we shall use narrative accounts, in the form of diaries as two disabled people, to analyse how AI is used as part of our daily lives, and the promise, support, and frustrations this brings. We shall also undertake a brief literature review of academic and professional articles on the topic of AI, disability, and ethics. Finally, we shall draw conclusions as to how developers might better approach the construction of AI software and technology. Within this thought piece, we shall use the social model of disability.which originated within the UK in the 1970s. In the document Fundamental Principles of Disability , UPIAS (Union of Physically Impaired Against Segregation) defined disability not as an impairment of the body or brain, but as a "relationship between people with impairment and a discriminatory society." The influence of Marxist thought and labour movement traditions is clear in the work of UPIAS and in *Capital*, Karl Marx,defined capital and labour not as things but as relationships. That is, the social model implies that it is society which disables individuals by the constructs which it places around us, and that it is because society is not inclusive that individuals are disabled. More than a billion people live with disability and there is a need to explore how AI technologies can affect this diverse group. AI research can be a force for good for disabled people as long as they are not marginalised. A roadmap which includes AI and ethical issues has yet to be developed according to the Alan Turing Institute [1].The creation of a network of experts and resources for AI and inclusion could help to address the "unmet need of assistive products crucial ..... to implement the UN Convention on the rights of persons with disabilities". A number of authors have written on the topic of disability, AI, and ethics (justice, or fairness). We shall summarise recent developments in this area below. It is to be hoped that these developments lead to a more inclusive, and hence ethical in my view, approach to the design of AI systems for those with disabilities, including myself.
Bennett and Keyes present two case studies, one on decision-making and the other on AI for the visually impaired to demonstrate how through failures to consider structural injustices in their design, they are likely to result in harm not addressed by a "fairness" framing of ethics. They call on researchers into AI ethics and disability to "move beyond simplistic notions of fairness, and towards notions of justice."

9. AI BASED VOICE ASSISTANT USING PYTHON 2019 SHENDE.D,UMAHIYA.R

Abstract: Artificial intelligence technologies are beginning to be actively used in human life, this is facilitated by the appearance and wide dissemination of the Internet of Things (IOT). Autonomous devices are becoming smarter in their way to interact with both a human and themselves. New capacities lead to creation of various systems for integration of smart things into Social Networks of the Internet of Things. One of the relevant trends in artificial intelligence is the technology of recognizing the natural language of a human. New insights in this topic can lead to new means of natural human-machine interaction, in which the machine would learn how to understand human's language, adjusting and interacting in it. One of such tools is voice assistant, which can be integrated into many other intelligent systems. In this paper, the principles of the functioning of voice assistants are described, its main shortcomings and limitations are given. The method of creating a local voice assistant without using cloud services is described, which allows to significantly expand the applicability of such devices in the future.

INTRODUCTION: Today the development of artificial intelligence (AI) systems that are able to organize a natural human-machine interaction (through voice, communication, gestures, facial expressions, etc.) are gaining in popularity. One of the most studied and popular was the direction of interaction, based on the understanding of the machine by the machine of the natural human language. It is no longer a human learns to communicate with a machine, but a machine learns to communicate with a human, exploring his actions, habits, behavior and trying to become his personalized assistant. The work on creating and improving such personalized assistants has been going on for a long time. These systems are constantly improving and improving, go beyond personal computers and have already firmly established themselves in various mobile devices and gadgets. One of the most popular voice assistants are Siri, from Apple, Amazon Echo, which responds to the name of Alex from Amazon, Cortana from Microsoft, Google Assistant from Google, and the recently appeared intelligent assistant under the name "AIVA". Section I, II presents a brief introduction to the architecture and construction of voice assistants. Section III provides proposed plan of work. Section IV provides methodology of the work of a voice assistant AIVA. Section V describes the test results of the voice assistant. Section VI and VII describes the conclusion and future scope of an assistant using various artificial intelligent algorithms, and gives a comparative evaluation of the learning ability of algorithms. The main goal of this work is to build a local voice assistant that does the work of human and the daily task that a human needed to do in daily life. AIVA (2018) aimed at developing a voice-controlled personal assistant which is doing many things such as to search the Internet. It has some new features like posting comments on the social media websites such as Facebook, Twitter, etc. By just few simple commands. You can also know the weather around you and can get the climate conditions in your region. It can open and launch web-applications and the local storage of the user computer. Each company-developer of the intelligent assistant applies his own specific methods and approaches for development, which in turn affects the final product. One assistant can synthesize speech more qualitatively, another can more accurately and without additional explanations and corrections perform tasks, others are able to perform a narrower range of tasks, but most accurately and as the user wants. Obviously, there is no universal assistant who would perform all tasks equally well. The set of characteristics that an assistant has depends entirely on which area the developer has paid more attention. Since all systems are based on machine learning methods and use for their creation huge amounts of data collected from various sources and then trained on them, an important role is played by the source of this data, be it search systems, various information sources or social networks. The amount of information from different sources determines the nature of the assistant, which can result as a result. Despite the different approaches to learning, different algorithms and techniques, the principle of building such systems remains approximately the same. the technologies that are used to create intelligent systems of interaction with a human by his natural language. The main technologies are voice activation, automatic speech recognition, Teach-To-Speech, voice biometrics, dialog manager, natural language understanding and named entity recognition.

LITERATURE SURVEY

1. Jarvis, Digital Life Assistant' 2013 Khobragade S.
This paper explains how the author's project uses voice as a communication format, which is basically the Speech recognition application.There are two main basic concepts in speech technology: Synthesizer & recognizer. A speech synthesizer takes input and produces an audio stream as output,while speech recognition takes an audio stream as input and turns it into text transcription.

2. 'Virtual assistant for the visually impaired' 2020 Iyer V.,Shah T.K. ,Sheth S.,Kailas D.
In this paper, the author explains how he built a software that provides a new dimension to access and provide commands to any website.

3. AI Based Voice Assistant Using Python' 2019 Shende D.,Umahiya R.,Raghorte M.,Bhisikar A.,Bhange A.
In this paper, the design and implementation of Digital Assistance is discussed. The project is built using open source software modules with PyCharm community backing which can accommodate any updates in the near future. The modular nature of this project makes it more flexible and easy to add additional features without disturbing current system functionalities.

4. Research Paper on Desktop Voice Assistant 2022 Dhanraj K.V.,Kriplani L. and Mahajan S.
A key objective of AI in this paper is to establish natural dialogue between humans and machines. Voice assistants are great innovations in artificial intelligence that can revolutionize how people live in a very positive way. Since voice assistants were introduced to smartphones, they have been widely accepted. Desktop voice assistants are programs that recognize human voices

5. Virtual Assistant Using Python 2021 Damarla K.
In this paper,the project works on voice input and gives output through voice and displays the text on the screen.The voice assistance takes the voice input via microphone and converts the voice into computer understandable language and gives the required solutions along with answers which are asked by the user.

This assistance connects with the world wide web to provide results that the user has questioned.

6. Empowering people with disabilities through AI 2018 Smith B. , Shum H.
In this paper,the benefits of empowering people with disabilities via employment goes well beyond offering opportunities for social participation and to live dignified and productive lives without seeking any help or guidance.In the workplace, people with disabilities are reported to be highly motivated and loyal, translating into extremely low turnover rates.

7. Desktop Voice Assistant for Visually Impaired 2020 Yadav A., Singh A., Sharma A.,Sindhu A. , Rastogi U.
This paper features a personal voice assistant which takes commands as per the individual,this is implemented via a synchronous process involving recognition of speech patterns and responding via synthetic speech,there is a need of a voice assistant which can not only take command through voice but also execute the desired instructions and give output either in the form of voice or any other means.

8. Artificial intelligence and disability: too much promise, yet too little substance 2020 Peter S. , Smith L.
The idea mainly focused on designing and implementing an assistive system for visually impaired persons to access the Android smartphones easily and the proposed system is used to help the visually impaired to have access to the most important features of the phone. The aim is to design a low-cost and high performance assistive device for daily activities of visually impaired persons.

9. AI Based Voice Assistant Using Python 2019 Shende D., Umahiya R., Raghorte M., Bhisikar A., Bhange A.
Using artificial intelligence, robotic arms and prosthetic limbs are being developed, clinicians and disabled individuals are being provided with decision support tools, and route planning software is being developed for visually impaired individuals. Through the use of such tools, many individuals become more accessible and experience a change in their lives.