Trends in Designing Virtual Assistant

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ABSTRACT

This Research article discusses ways in which produced technology could work as saddle to discover a sharp virtual assistant (Ana) with focus on real emotions of user. It will also save the previous conversation for further reply (eneaees the two-way conversation). This report explores how to leverage emerging technology to create a smart virtual assistant (Ana) with focus on user specific knowledge and emotions. It requires the ability to communicate socially through the use of Artificial intelligence and machine learning keeping (and analysing) information within the user context. It is proposed that the concept of virtual personal assistants will soon become a reality in new technologies. The idea was generated from existing platforms like Gooele assistant, Chabot’s etc.

Keywords: Chatbot, Google Assistant Artificial Intelligence, Virtual Assistant

Introduction

A virtual assistant is an Artificial Intelligence-based technology. Our main goal of this project is to let the assistant understand the user’s emotions talking to it. The user will normally have to converse with the assistant as we talk to a person. In that conversation the assistant will collect all the data and make the decisions and try to give the user the better result depending on the situation and it will also be able to perform some simple tasks like other assistants do. Text
emotion recognition means it’s closely related to the study of emotions. Sentiment Analysis aims to detect optimistic, neutral or negative feelings from messages, while emotional analysis aims to detect and classify types of feelings from text communication such as anger, indignation, anxiety, satisfaction, sadness and surprise. Emotion detection can have useful applications such as:

Calculating how satisfied our people are with different indexes has different definitions, most of which develop around cultural, environmental and social considerations. Since mid-2000, government and organizations around the world have been paying rising attention to the Happiness index.

Emotion detection may have useful applications such as:

Recognition of text emotions means it is closely connected with the study of emotions. Sentiment Analysis aims at detecting optimistic, neutral or negative feelings from messages while emotional analysis aims at detecting and classifying types of feelings from text communication such as anger, indignation, anxiety, satisfaction, sadness and surprise. Emotion detection can have useful applications like:

Calculating how satisfied our people are with different indexes has different definitions, the majority of which develop around cultural, environmental and social considerations. Governments and organizations around the world have been paying increasing attention to the
Happiness index since the middle of 2000. Moreover this is era of e-platform and user want each and everything at one place and as soon as possible. There is no existence of word “Wait” so this will help them to fulfil this purpose. It will decrease the requirement of manpower which will automatically bring this software to economically good level.

Key needs recognition is to:

- It may be used to interact with human emotions in future robotics / machinery.
- It will save your previous talk so that it would continue and reply based on previous talks unlike Siri and other virtual assistants it will not forget the previous details.
- It will help you recover from serious problems such as depressions and not only will this make an introvert person share their feelings without hesitation.

### Literature Survey

<table>
<thead>
<tr>
<th>Name of Pair</th>
<th>Year</th>
<th>Description</th>
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<tbody>
<tr>
<td>[1] A Study on Virtual Assistant in Artificial Intelligence</td>
<td>2017</td>
<td>Virtual assistant, like Second Life, will contribute to state-of-the-art technologies too. Virtual Assistant (VR) is a term that applies to computer-simulated environments capable of simulating physical presence in real world locations, as well as imaginary worlds.</td>
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<td>[2] Next-generation of virtual personal assistants (Microsoft Cortana, Apple Siri, Amazon Alexa and Google Home)</td>
<td>2018</td>
<td>This plan presents the Next-Generation concept of Virtual Personal Assistants, which is hereby VP As a system designed to converse with human beings, with a coherent structure. This VP As device used voice, graphics, video, gestures and other communication methods in both the input and output channels.</td>
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and User Perception of Customer Service Systems for E-Commerce

[1] Virtual personal assistance 2017 Lizzy is fully working as Virtual Personal Assistance, which can perform task offline condition as we given her local modules to her. In online condition Lizzy gets more resources to work.

AI for speech recognition based on neural networks 2015 The language recognition model was based on artificial neural networks. This was researched using genetic algorithm to create a learning neural network. This method was applied in system identification numbers, which aided the awareness of the voice command recognition system.

Feasibility Study

Technical feasibility of artificial intelligence is not science fiction any more., schedule the monitor devices, if you live your phone tech or. Virtual assistants ‘ecosystem and scale of activity without them where and it definitely isn’t far away. This project is technically feasible as we will use python language, deep learning, machine learning and artificial intelligence to build this project.

It will work on windows as well as mobile. For building this we will use:

- STS (Speech to Text)

- TTS (in human speech which translates text image)

Intelligent tagging and decision-making help to interpret the request of the user. For example: if you ask what you should do then from the previous message / chat, i.e. you’re like, you don’t like it to respond to your trite. One important thing is that in this project we will use choice. In this the voice assistant must determine
who is speaking and whether an answer is required. So we can avoid comic situations.

, every points its strengths. Cortana and recognized device to communicate with. Yet these mobile assistants have certain drawbacks when it comes to integration with third party apps. Their functionality also differs, and they run a specific platform.

**Economical Feasibility:**

The most widely used method of determining the viability of a new jet is the economic feasibility study. It's also referred to as cost analysis. Money and time are all about economic feasibility. We also measure an estimated frame under the capital and operating costs to earn returns on investment taking into account the future value of the project. We are following other best practices during the economic feasibility study process to get the desired result, Including:

Our Virtual Assistant is well aware of our Virtual Assistant. Our Virtual Assistant performs a comprehensive research to help you complete every given project successfully. When we lay our foundation on customer satisfaction, we are sure we can achieve that. Ana(Virtual Assistant) is well
equipped with a range of skills and knowledge to provide you with outstanding services. We’ll also take care that the project is assisted by management and the team. It will help you solve your dilemma in the best possible way, as it has a built-in feature that will save the details of your previous conversation and recommend you.

**Conclusion**

The world is moving from Intelligent System to System. As we all know technology is evolving day by day, everything is becoming innovative and strong. So, research on the detection of emotions by text is reported in this paper. Many digital virtual assistants have been launched and delivered, but they can only perform the task they’re building because they don’t save our previous chat and focus on the current information they’ve received.

It is not only about detection but about sharing thoughts, taking suggestion/recommendations and much more. It will not only match the word we spoke with keyword but will also save the details of previous chat and it will be completely confidential and no one can access the data or chat. For e.g. when we creating some account in Gmail or Facebook they used to ask us a question in the form of hint whose answer will be known only by us so we will also do same kind of thing to maintain privacy and confidentiality. It will be a future friendly virtual assistant with whom you can share your view, thoughts and many more. So as per our investigation no such technology has been developed so far. Although many robots have been developed one of them is Sofia who acts very familiar to humans and understand human emotions. So, we are looking forward to develop an assistant which will not only chat but will also help to cure many psychological problems like depressions. There are so many problems in day to day life which are not curable by medicines but are curable by sharing love and support and this system will help in all understanding this whole problem with complete solution.

**References**

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