



Virtual Voice Assistant



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Abstract

Artificial intelligence technology is fast becoming the scope of every major research and industrial field. The use of this technology has given way to a number of assistive programs that make everyday tasks easier and more convenient. One such application of AI-based assistive technologies is the rise of the virtual voice-assistant.

The development of voice assistants made the luxury of hands-free device control a daily reality. Whether it is embedded in one's phone like Bixby and Siri or sitting at a desk like Alexa and Google home, it enables the user to perform tasks such as turn on the lights, receiving answers to a question, play music or place an online order, this technology is able both to respond to a user's command and anticipate their every need.

Proposed Solution

With a virtual voice assistant, the user will be able to control their device to its fullest; they will be able to play music, open youtube videos and even search on the internet with just their voice. This encapsulates the main focus of artificial intelligence which is to work alongside humans to make their lives easier by automating some of their daily activities and organising their work in the same way a human assistant would. The assistant must be able to understand human language and be able to provide responses based on its internal speech recognition system.

Methodology

The proposed project will incorporate the IBM Watson speech to text api call that utilises deep learning to identify the words being said and then converting it into text. It enables your voice applications using neural technologies for speech recognition.

Reference

- v, Geetha & Gomathy, C K & Kottamasu, Manasa & Kumar, Nukala. (2021). The Voice Enabled Personal Assistant for Pc using Python. *International Journal of Engineering and Advanced Technology*. 10. 162-165. 10.35940/ijeat.D2425.0410421.
- Chinchane, A. (2022). Sara: A voice assistant using python. *International Journal for Research in Applied Science and Engineering Technology*, 10(6), 3567–3582. <https://doi.org/10.22214/ijraset.2022.44517>
- Pandey, D., Ali, A., Dubey, S., & Srivastava, M. (2022). Voice Assistant Using Python and AI. *International Research Journal of Engineering and Technology (IRJET)*, 9(5).
- <https://www.ibm.com/downloads/cas/ZDJDQLGV>
- <https://realpython.com/python-speech-recognition/#working-with-microphones>
- <https://www.ijraset.com/best-journal/personal-voice-assistant>