Implementing Intelligent Virtual Assistant

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Abstract: *Our daily lives have been immensely enhanced by the rise of intelligent virtual assistants, which has revolutionised the way we engage with technology. These computer programmes replicate human interaction and carry out tasks for users by utilising artificial intelligence and natural language processing. They can be used on a variety of devices and are useful for scheduling, taking notes, doing research, and even writing prescriptions. These virtual assistants respond to consumer inquiries quickly and thoughtfully by using voice input and tools like OpenAI'sChatgpt. They can do searches on a number of different platforms, including Wikipedia, YouTube, Google, and even forecast the weather. These virtual assistants can converse with people in a more human-like manner thanks to the inclusion of natural language processing, which makes the interaction more natural and user-friendly. As more and more smart home and automobile products incorporate these virtual assistants, people will find it simpler to operate their homes and vehicles with just their voice. Additionally, they are used in customer service to offer immediate assistance to customers as well as in healthcare to assist doctors with patient care and diagnosis.Intelligent virtual assistants have countless potential uses, and as technology advances, we may anticipate even more fascinating and creative ways they will enhance our daily lives. Intelligent virtual assistants have developed into a necessary tool for both consumers and enterprises due to their capacity to offer individualised support and streamline corporate procedures.*

Keywords: Intelligent Virtual Assistant, Speech Recognition, Artificial Assistant, Speech to text, Text Analyzing.

REFERANCES

[1]. HarisIsyanto, AjibSetyoArifin, Muhammad Suryanegara, "Performance of Smart Personal Assistant Applications supported Speech Recognition Technology using IoT-based, Voice Commands" on June 01, 2021, IEEE.

[2]. VetonKёpuska, Gamal Bohouta, "Next-Generation of Virtual Personal Assistants" 78-1-5386-4649-6/18/©2022 IEEE.

[3]. Edwin Shabu, Tanmay Bore, Rohit Bhatt, Rajat Singh, "A Literature Review on Smart Assistant" International Research Journal of Engineering and Technology (IRJET) Issue: 04 | Apr 2021.

[4]. AtiehPoushneh, "Humanizing voice assistant: The impact of voice assistant personality on consumers' attitudes and the behaviors" Journal of Retailing and Consumer Services 58 (2021) 102283.

[5]. V. Geetha, C. K. Gomathy, KottamasuManasa Sri Vardhan, Nukala Pavan Kumar "The Voice-Enabled Personal Assistant for Pc using Python", International Journal of Engineering and Advanced Technology • April 202.

[6]. Vishal Kumar Dhanraj, Lokesh kriplani, Semal Mahajan, "Research paper on desktop voice assistant" International Journal of Research in Engineering and Science (IJRES)-2022.

[7]. P. Goyal, A. K. Sahoo, T. K. Sharma, and P. K. Singh, "Internet of Things: Applications, security, and privacy: A survey," Materials Today: Proceedings, 2020/05/20/ 2020, DOI: https://doi.org/10.1016/j.matpr.2020.04.737.

[8]. Chatbot Learning: Everything you need to know about machine learning chatbots (2020). https://www.whoson.com/chatbots-ai/chatbot-learning-everything-need-knowmachine-learning-chatbots.

[9]. VetonKepuska, Gamal Bohouta" Next-Generation of Virtual Personal Assistants (Microsoft Cortana, Apple Siri, Amazon Alexa, and Google Home)"978-1-5386- 4649-6/18/$31.00 €2018 IEEE

[10]. Prajyot Mane, Shubham Senone, Nachiket Gaikwad and Prof. Jyoti Ramteke "Smart Personal Assistant using the Machine Learning"978-1-5386-1887-5/17/$31.00 2017 IEEE

[11]. S. Nagaprasad, D. L. Padmaja, YaserQureshi, S.L. Bangare, Manmohan Mishra, Mazumdar B. D., "Investigating the Impact of Machine Learning in Pharmaceutical Industry", Journal of Pharmaceutical Research International (Past name: British Journal of Pharmaceutical Research, Past ISSN: 2231-2919, NLM ID: 101631759), Volume 33, Issue 46A, Pages 6-14, Publisher: JPRI https://www.journaljpri.com/index.php/JPRI/article/view/32834

[12]. Ajay S. Ladkat, Sunil L. Bangare, Vishal Jagota, Sumaya Sanober, Shehab Mohamed Beram, Kantilal Rane, Bhupesh Kumar Singh, "Deep Neural Network-Based Novel Mathematical Model for 3D Brain Tumor Segmentation", Computational Intelligence and Neuroscience, vol. 2022, Article ID 4271711, 8 pages, 2022. https://doi.org/10.1155/2022/4271711

[13]. S. L. Bangare, "Brain Tumor Detection Using Machine Learning Approach", Design Engineering ISSN: 0011-9342,Scopus Index- Q4, EiCompendex, Volume 2021, Issue 7, Pages 7557-7566, Publisher Design Engineering.

[14]. S. L. Bangare, and P. S. Bangare. "Automated testing in development phase." International Journal of Engineering Science and Technology 4.2 (2012): 677-680.

[15]. Sunil L. Bangare, Deepali Virmani, Girija Rani Karetla, Pankaj Chaudhary, Harveen Kaur, Syed Nisar Hussain Bukhari, Shahajan Miah, "Forecasting the Applied Deep Learning Tools in Enhancing Food Quality for Heart Related Diseases Effectively: A Study Using Structural Equation Model Analysis", Journal of Food Quality, vol. 2022, Article ID 6987569, 8 pages, 2022. https://doi.org/10.1155/2022/6987569

[16]. K. Gulati, M. Sharma, S. Eliyas, & Sunil L. Bangare (2021), "Use for graphical user tools in data analytics and machine learning application", Turkish Journal of Physiotherapy and Rehabilitation, 32(3), 2651-4451.

[17]. P. S. Bangare, Ashwini Pote, Sunil L. Bangare, Pooja Kurhekar, and Dhanraj Patil, "The online home security system: ways to protect home from intruders & thefts." International Journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN (2013): 2278-3075.

[18]. Xu Wu, Dezhi Wei, Bharati P. Vasgi, Ahmed Kareem Oleiwi, Sunil L. Bangare, Evans Asenso, "Research on Network Security Situational Awareness Based on Crawler Algorithm", Security and Communication Networks, vol. 2022, Article ID 3639174, 9 pages, 2022. https://doi.org/10.1155/2022/3639174.

[19]. V. Durga Prasad Jasti, Enagandula Prasad, Manish Sawale, ShivlalMewada, Manoj L. Bangare, Pushpa M. Bangare, Sunil L. Bangare, F. Sammy, "Image Processing and Machine Learning-Based Classification and Detection of Liver Tumor", BioMed Research International, vol. 2022, Article ID 3398156, 7 pages, 2022. https://doi.org/10.1155/2022/3398156

[20]. Zamani, A. S., Dr. Seema H. Rajput, Dr. Harjeet Kaur, Dr.Meenakshi, Dr. Sunil L. Bangare, & Samrat Ray. (2022). Towards Applicability of Information Communication Technologies in Automated Disease Detection. International Journal of Next-Generation Computing, 13(3). https://doi.org/10.47164/ijngc.v13i3.705