IJARSCT
International Journal of Advanced Research in Science, Communication and Technology
International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal
ISSN: 2581-9429
Volume 5, Issue 1, May 2025
Impact Factor: 7.67

Desktop Voice Assistant using Python

Prof. Diksha Fulzele[1], Lalit Bisen[2], Sahil Humane[3]
Assistant Professor, Dept. of Computer Science & Engineering[1]
Students, Department of Computer Science & Engineering[2,3,4,5]
Abha Gaikwad-Patil College of Engineering and Technology, Nagpur, Maharashtra, India

Abstract: *A voice assistant developed to facilitate desktop functions and deliver real-time responses to user queries through natural language interaction. The system leverages speech recognition, natural language processing (NLP), and system command execution to perform tasks like opening applications, accessing system details, adjusting volume, and providing informative answers via APIs such as ChatGPT and WolframAlpha. Additionally, the assistant features preliminary integration with IoT modules aimed at healthcare applications like IV bag monitoring. Designed to improve efficiency and enable hands-free computing, Spiral offers a user-friendly interfacefor students, working professionals, and users with accessibility needs*

Keywords: Python, Speech Recognition,NLP,pyttsx3,OpenAI, WolframAlpha, Tkinter, IoT, Desktop Automation

Copyright to IJARSCT
www.ijarsct.co.in

DOI: 10.48175/IJARSCT-26185