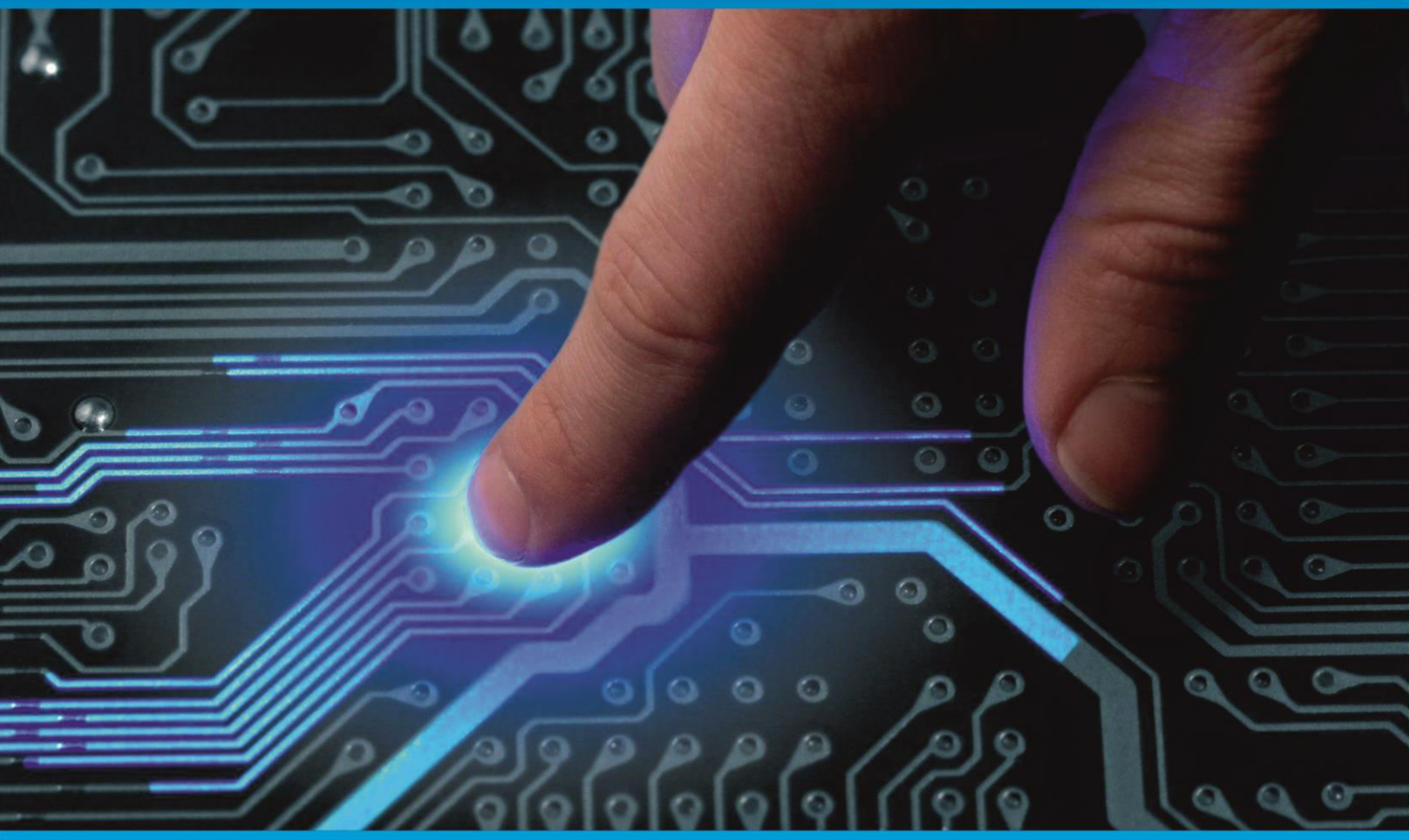
IJIRCCE

e-ISSN: 2320-9801 | p-ISSN: 2320-9798



INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN COMPUTER & COMMUNICATION ENGINEERING

Volume 9, Issue 3, March 2021

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

Impact Factor: 7.488

9940 572 462 | 6381 907 438 | ijircce@gmail.com | www.ijircce.com

International Journal of Innovative Research in Computer and Communication Engineering

| e-ISSN: 2320-9801, p-ISSN: 2320-9798| www.ijircce.com | |Impact Factor: 7.488 |

|| Volume 9, Issue 3, March 2021 ||

| DOI: 10.15680/IJIRCCE.2021. 0903155|

Virtual Assistant Software for Automation of Windows Operating System

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ABSTRACT: The project aims to develop a personal-assistant for Windows-based systems. This Personal Assistant draws its inspiration from virtual assistants like Cortana for Windows, and Siri for iOS.It has been designed to provide a user-friendly interface for carrying out a variety of tasks by employing certain well-defined commands. Users can interact with the assistant either through voice commands or using keyboard input. As a personal assistant, our personal assistant assists the end-user with day-to-day activities like general human conversation, searching queries in google, Bing or Wikipedia, searching for videos, retrieving images, live weather conditions, word meanings, searching for minimize and maximize the window, translating a word or sentence from one language to another language and reminding the user about the scheduled events and tasks. The user statements/commands are analysed with the help of machine learning to give an optimal solution.

KEYWORDS: **:-** Personal Assistant, Windows Systems, Automation, Machine Learning

I. INTRODUCTION

The main purpose of this software is to automate users daily-basis tasks. It will ease most of the work of the user as a complete task can be done on a single command. Cortana is designed to aid the tasks of users in Windows but it lacks automation. Other Existing systems also lack these features. Currently, the project aims to provide the windows Users with a Virtual Assistant that would not only aid in their daily routine tasks like searching the web, opening applications but also helping the user with all kinds of windows integrations and other basic functions of personal assistant. Users can interact with the assistant either through voice commands or keyboard input. The Virtual-assistant assists the end-user with day-to-day activities like general human conversation, searching queries in various platforms like Google or Wikipedia, searching for videos, live weather conditions, and reminding the user about the scheduled events and tasks. The user statements/commands are analysed with the help of algorithms to give an optimal solution. This personal assistant is being developed as an automation tool and virtual assistant for Windows based Operating Systems.

II. RELATED WORK

Other Existing Personal Assistants lack automation in environment it works on. Some of the issues like moving mouse, control mouse and keyboard events. To overcome these issues, this personal assistant is developed. Also, system compatibility issues are overcome using this proposed system.

The personal assistant is a virtual assistant that can help you perform tasks. It helps you achieve more with less effort while allowing you to focus on what matters. The personal assistant is to search the internet, find answers to questions, solve scientific and arithmetic problems, gives daily news, complete OS Security controls to user such as lock, shut down, restart, performs daily OS interactions such as taking notes and emptying recyclebin , and much more.

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III. PROBLEM STATEMENT

Generally, some of the Virtual Assistant for windows are not fully automated. So many users are not using these personal assistants for their daily tasks. To overcome from that issue, this person assistant is been used to perform the daily tasks for the users. The main aim of the personal assistant is to automate the day-to-day tasks of an end-user.

IV. PROPOSED ALGORITHM

The objectives for creating this application are:

- By voice recognizing user can control the system without using the mouse or keyboard.
- The user can able to get location and weather report of the place by telling the query.
- The user can able to perform any kind of arithmetic and scientific calculation.
- By telling the query, the user can listen daily news from top magazines and newspaper
- The user can able to web scrape data from the browser.

V. GOALS

The User can perform the daily task and all other works in system through voice recognizing. All the things will be trained and data will be stored. Also, manual inputs are accepted. Thus the end-user accomplishes his day to day tasks with ease.

VI. ADVANTAGES

- Low background memory usage
- No additional software required for installation.
- Find facts, definitions, and info.
- Compatible with all Windows version.
- Built-in training data module

VII. RESULT

- The project has been implemented on python language. Also different attributes have been added to the project which will prove to be advantageous to the system. Using voice recognizing the user can able to perform the tasks.

IX. CONCLUSION AND FUTURE WORK

In future we are converting into mobile application by using Kiwi.We are planning to add new features i.e., booking cabs and getting appointments.We are working to give seamless user interface for flawless working experience.By using this Virtual Assistant the user can control the system by voice recognizing. Through this voice assistant, we have automated various services using a single line command. It eases most of the tasks of the user like searching the web, retrieving weather forecast details, translating from one language to others.

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ISSN INTERNATIONAL STANDARD SERIAL NUMBER INDIA

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