Wireless Voice Controlled Robotic Car

Prof. Anuja Gaikwad[1], Aditya Kanojiya[2], Akash Badak[3], Adarsh Yadav[4], Rahul Sonawane[5]

Professor, Department of Computer Engineering[1]

Students, Department of Computer Engineering[2,3,4,5]

G H Raisoni Institute of Engineering and Technology, Pune, Maharashtra, India

Abstract: *The Wireless Voice Control Robotic Car project is a system used for security purposes. Although many wireless-controlled robots use RF modules, this project utilizes an Android smartphone for robotic control, with more control commands available compared to RF modules. To use this project, the user must install an application on their mobile device and turn on Bluetooth. Various commands, such as "go ahead," "get back," "turn left," "turn right," "stop," "break," and "show me your dance" are available. While the Robotic Car is in action, the user can watch a live video feed from the camera installed on it. In order to successfully connect to the live feed, users must configure their system with a username and password. Successful authentication is necessary to ensure that the data remains confidential. Once authentication and configuration are complete, the user has several options for camera settings.*

Keywords: Bluetooth, Voice, Speech to Text, Robot, Navigation, Servo Motors, ESP 32 CAM

REFERENCES

[1]. Design of a Bluetooth Enabled Android Application for a Microcontroller Driven Robot By Vito M. Guardi,(May 2014).

[2]. Android Controlled Mobile Robot By Jorge KazacosWinter,(July2013).

[3]. Android Based Robot Implementation For Pick and Retain of Objects By Ranjith Kumar Goud, B. Santhosh Kumar, (Oct 2014).

[4]. Smart phone based robotic control for surveillance applications By M.Selvam,(IJRET 2014)

[5]. Controlling a Robot using Android Interface and Voice By Kishan Raj KC,(2012).

[6]. Motion Control of Wheeled Mobile Robot By GyulaMester,(SISY 2006)

[7]. Design of PI and PID Controllers with Transient Performance Specification By J. C. Basilio and S. R. Matos,(IEEE 2002).

[8]. Robot Control Design Based On Smartphone by Xiao Lu, Wenjun Liu, Haixia Wang, Qia Sun, IEEE, 978-1-4673-1382, pp-2820-2823, Jun 2013.

[9]. Android phone controlled robot using Bluetooth by Arpit Sharma, Reetesh Verma, Saurabh Gupta, Sukhdeep Kaur