Sensor and Component of Hardware and Software based Robot which is Helpful for Old Age People

[1]Supriya Mishra, [2]Mr.Sudhir Agrawal

Research scholar, Computer science & engineering Dept[1],

Professor & Dean Computer Science & Engineering Dept.[2]

Abstract

Now a day's technology is growing fastly as time change and there is so busy schedule of working people (women and men) , By seeing all changes the old age people or helpless people who were in house but there is no one at time to help them the robot is enhanced for help these people because the working people go out for there job as time schedule so there is problem facing in home for them. In this paper the working principle and component of work are described but later I do more work about disabled people on my research work.

Keyword: Old-Age people, robot, sensor, component

Introduction

Technology is a trend that affects human existence in every part of the world. Robots are an exciting example of what the future of technology holds. Robotics has enhanced human life and industry significantly, thanks to the technology [1]. Adults with autism are already a regular thing in many industries, including healthcare, military service, and domestic assistance. global population is growing, therefore making the requirements of this demographic an increasingly significant issue for health providers, government officials, caretakers, and families. Due to these reasons, buddy robots (which serve as aids to elderly people) are often seen as having an authoritarian function in helping individuals do their caring duties without assistance. An increased old population is often brought up as a method of dealing with the rising number of senior persons .Internet of things mainly deals with connecting different devices with the help of internet and making them interact with each other and the server with the evolution of IOT much larger amount data can be transferred between various things and the server as due to large amount of data transfer it requires continuous high speed internet. The use of IOT in robotic applications is to reduce the human intervention and simultaneously the communication of human and robot. The robots are classified into two categories the industrial robots and the domestic robot like the humanoid robot[4]. This paper mainly focuses on using IOT in industrial robots.

Literature review

HINVO's surveillance system consists of an android device and a robot. The robot is controlled by a remote operator via the wifi module. The robot comprises of an Arduino microcontroller to control the robot's motion, an android smartphone running the Android operating system, and the required hardware such as chassis, motors, power supply, etc. The remote operator controls the robot via sending control signals to the smartphone which are then forwarded to the Microcontroller, which then navigates the robot in the direction desired. The camera on the smartphone sends video feedback to the remote operator concurrently over the internet as a result the operator is able to navigate the robot from a remote location

The data receive by the Bluetooth module from android smart phone is fed input to the controller. The controller acts accordingly on the DC motor of the robot. The robot can move to move in all the four directions using the android

phone. The direction of the robot is indicators using LED indicators of the Robot system.(IRJET-V5I1149.) Remote operation is achieved by any smart-phone/Tablet etc., with Android OS, upon a GUI (Graphical User Interface) based touch screen operation. Transmitting end uses an android application device remote through which commands are transmitted. At the receiver end, these commands are used for controlling the robot in all directions such as forward, backward and left or right and captures the video and transmits to TV through RF signal
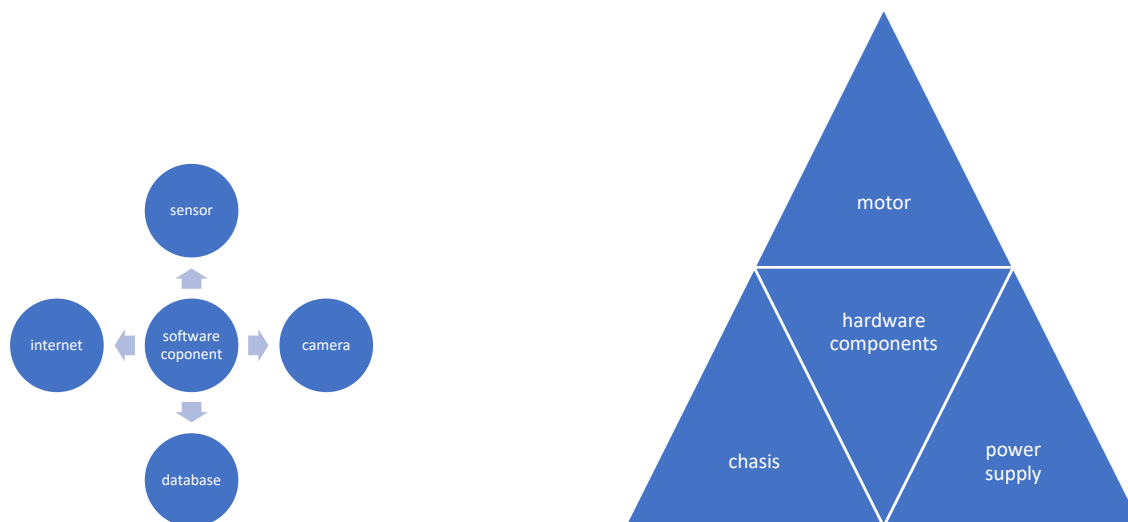
In existing systems were used the DTMF ba and GSM based Robotic Control has a reason drawbacks such as the system requires more energy The controlling unit and robot unit are must b Line of Sight, For different mobile phone controlling unit must be reprogrammed, so thus operation of the system is Mobile phone Depend In DTMF Standard, and the Cable Standards are main constraints of the system

Methodology:

In this paper I am trying to do several task with robots which is helpful for old age people who living with their family or any old age for both its suitable. Robotic systems that utilize the making plans, observation, concurrence, and successive cognitive orientations review process acquire questionnaire questions from guardians and carry out the intellectual orienting examination control and experimental group. Robot then engages in a discussion with the user and gathers feedback.

Proposed work:

In Robots there are some hardware and software components are use b which our work is run properly .In which the robots have some functionality like sensoring, helping, recognizations, and some task programme which helpful for mainly our old age people because they are not able to do their daily work, In this paper a robot do there people work for helping like if there are no one in house and the old people want some help like glass of water or other, then a robot can go and take water by using sensors and camera which is fitted on their system(database). In below figure the block diagram of robots is shown in which both the components of hardware and software are shown.

Conclusion and discussion:

 All over the work the robot is able to do task which is just like household after that all the places is fitted on the database of robot by which we can do more specific work and use some other technology like IOT and AI&ML work which is more suitable to do all the task in which robot can speak and learn our languages too.

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