

Personal Assistance for seniors who are self-reliant

Team List-

- **Linkeshvaran R - 720719106063 (Team Lead)**
- **Karthick Bala K - 720719106053**
- **Monish K - 720719106073**
- **Karthikeyan -720719106055**

Introduction:

The Internet of Things (IoT) is helping society facilitate a major challenge of meeting the needs of an ageing population. As people live longer, they will inevitably suffer from a greater number of health issues. Care homes are expensive. As technology improves, IoT can help eliminate these issues. Data collected from IoT devices formulates an individual's daily story by monitoring their routine, picking up inconsistencies and alerting emergency services if necessary. Connected IoT devices in the home improve safety, with experts projecting sales of 50 million wireless consumer devices for monitoring health by 2017, the smart home is here to stay.

Literature Survey:

The purpose of this chapter to review the previous researcher on personal assistance for seniors who are self-reliant. This chapter will present the main recent works on this.

There is a rising concern in designing options for elderlies residing in a society with an increased population ageing. IoT is a revolutionary phenomenon that transforms our life entirely as well as aims to revolutionize current healthcare into a more individualized, precautionary and inclusive approach to treatment. In order to integrate these two main problems, this research provides an IoT-ready approaches for elderly living treatment that can track and record critical details for patients in emergencies and include protocols for activating alarms. The strong low / low-cost / wireless capabilities make this approach into a secure and convenient wristband, perfect for anywhere and anywhere.

1. MARIA GABRIELLA MELCHOIRE Published on "IRCCS INRCA-National Institute of Health and Science on Ageing...2022". Caring help is essential for carrying out everyday activities when older persons age alone and become weak with functional limitations. The current study set out to examine the role and features of privately employed Personal Care Assistants (PCAs) who provide care for elderly people in Italy in light of the family's decreasing

capacity to provide care and the under-resourcing of governmental services. In the "Inclusive ageing in place" (IN-AGE) project, 120 qualitative interviews with elderly persons in their homes in the Italian regions of Lombardy, Marche, and Calabria were conducted in 2019. Along with some basic quantifications of assertions, a content analysis was done. Results revealed that PCAs were helpful in 27 situations, mostly when older citizens' health difficulties were raised.

2. GUNTHER EYSENBACH Published on "JMIR M health U health 2021".

With the benefits of hands-free and eyes-free engagement modalities to manage requests, voice assistants based on smart speakers promise to support the elderly population. The advantages of this kind of gadget are seen differently by older persons, although little is known about this. The ease of a speech-based engagement contributed to the favourable first reception to voice assistants. Particularly, it was common to finish an engagement with a voice assistant by expressing gratitude or providing criticism on the quality of the responses. Asking queries about health care and streaming music were the two main themes of orders given during the first conversation. However, the majority of the subsequent responses were negative due to the challenges in creating a structured language for a command.

3. Mithra Venkatesan published on 2021 IEEE Pune Section International Conference (Pune Con)". The robot for the elderly discussed in this essay is made up of numerous electrical components that can be changed in the future and utilised to create new robotic appliances that may be used in a domestic setting. A personal assistant robot called "Robo care for Elderly" is a prototype that will one day be utilized to care for and accompany the elderly. The Raspberry Pi microcomputer, an ultrasonic sensor, a PIR sensor, a temperature sensor, LEDs, an integrated Bluetooth module, a Dc motor, a servo motor, speakers, etc. are all part of this system. The major goal of the created work is to create a personal assistant robot prototype that is affordable and usable in every home, improving the usage of technology

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