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# Robot for Serve Food and Medicines to Patients of Corona Virus in India

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***Abstract:*** ***This project is an innovative solution to robotics in health care and more important to the management and control of the spread of the corona virus disease 2019(COVID-19).The main facilities of the robots is to ensure cleaning, sterilization and to minimize person-to-person contact and support in hospitals and similar facilities such as quarantine.This will supportive as well as helps to minimizing the life threat to medical staff and doctors to active role in the management system of the COVID-19 pandemic. The main point of view of this robotics to highlight the importance of medical robotics in general and then to connect its utilization by the multipurpose robot of covid treatment. This is improve the smart telemedicine. which is also effective in similar situations.***

## I. INTRODUCTION

Looking for the today's need We are assembling a project to protect yourself from viruses This includes building your own robot to maintain social distance. The robot delivers food and medicine with the help of a remote control system. We have added video conferencing functions in it. Because we can identify if something is available to the patient or how he is doing And we can treat them according to his needs and we can give whatever is needed to the patient with the help of robots. In this robot we have created a new robot using mechanical electrical electronics . Its sole purpose is to maintain a man-to-man social distance and it does this with the help of robots It uses two geared motors ,battery and battery indicator.

## II. LITERATURE REVIEW

*A.* Toshihiro Yukawa et al (2004) concluded a robot that can perform nursing tasks in a hospital or welfare facility. The robot has omni-directional mechanism, and has high controllability and the capability to make small turns. As well, wireless correspondence between the robot and an operator enables the robot's autonomous movement in a hospital.[1]

*B.* Yoshiro Hadflniv et al(2004) concluded a serrice robot that can deliver parcels, letters or documents in such an euvimnment design policy, architectum, methodology and implementation of this system art presented. [2]

*C.* Simon thief et al (2009) studied in the application of a team of service robots within hospital environments. [3]

*D.* John hu et al (2011) studied about a mobile robotic nurse assistant (RONA) is highly desired to enhance the quality of care that nurses and their staff can provide star technologies is developing a revolution array RONA system that provides physical assistance to nurses in hospital ward through modular control software architecture robotic system allows multiple operation control.[4]

*E.* Francisco Peleato et al (2013) concluded an innovative solution with a Smart Global Positioning System (S-GPS) framework and a novel algorithm for tracking delivery robots using multilateration technique with optimal number of references. The S-GPS framework enables to compute coordinates of all static sensors and mobile robots within the building and Accept for fault tolerance in case of sensor parts failures. The algorithm provides precise localization of patients and delivery robots for improved navigation.[5]

*F.* Ho Seak Ahn et al(2015) studied of healthcare robot system for healthcare environments to save time for medical staff evaluating the performance and efficiency of the proposed VOA robotic software framework.[6]

*G.* Yasuhisa Hirata et al (2015) concluded a concept of delivery robot system for supporting the Hospital staff and overall control system for delivering the require with proper time. The delivering tasks of the robot is realized based on a communication between the robot and the human.[7]

*H.* Seohyn Jeon et al(2016) studied in this paper the multiple mobile robots for hospital logistic application proposes and algorithm that reduces computational resource for calculating the minimum cost for finding the route of multiple choice.[8]

*I.* Ji Eun Han et al ( 2017) concluded Gnluence service context and experiences both in direct and indirect ways. the view point of actual application to healthcare environment. Instead functional quality is the major determinant which patients could recognize relatively easily during the process of healthcare service.[9]

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*J.* Jin Liu et al (2019) concluded a service robot cloud platform to overcome this problem. Firstly, the service robot cloud platform is designed. Secondly, the robot service scheduling Voice system is used to verification of availability and high services accuracy of the platform.[10]

*K.* Thanh Thi Nguyen et al (2020) take a survey of AI methods being used in various applications in the fight against COVID-19. they also contributed to helping humans in the touch fight against COVID -19.[11]

*L.* Zeashon Hameed Khan et al (2020) concluded the prime utilization of such robots is to minimize the social distance and cleanliness and supports in hospitals and similar facilities such as a quarantine and to minimize the spread of the novel corona virus disease 2019 (COVID19).[12]

## III. CONCLUSION

In this paper, we have presented a robot for serve food and medicines to patients of corona virus in India.We concluded that moving towards the high technology the upcoming model is robot food and medicine delivery system in which we provide. This robot help to doctor and avoid man touch. To maintain the social distance.

## REFERENCES

[1] T. Yukawa, N. Saito, W. Matsuoka, A. Kanda, and H. Okano, "Autonomous control of care and welfare robot," 2004 1st IEEE Tech. Exhib. Based Conf. Robot. Autom. Proceedings, TExCRA 2004, pp. 53–54, 2004, doi: 10.1109/texcra.2004.1424993.

[2] Y. Hada, H. Gakuhari, K. Takase, and E. I. Hemeldan, "Delivery service robot using distributed acquisition, actuators and intelligence," 2004 IEEE/RSJ Int. Conf. Intell. Robot. Syst., vol. 3, pp. 2997–3002, 2004, doi: 10.1109/iros.2004.1389865.

[3] S. Thiel, D. Häbe, and M. Block, "Co-operative robot teams in a hospital environment," Proc. - 2009 IEEE Int. Conf. Intell. Comput. Intell. Syst. ICIS 2009, vol. 2, pp. 843–847, 2009, doi: 10.1109/ICICISYS.2009.5358271.

[4] J. Hu et al., "An advanced medical robotic system augmenting healthcare capabilities - Robotic nursing assistant," Proc. - IEEE Int. Conf. Robot. Autom., pp. 6264–6269, 2011, doi: 10.1109/ICRA.2011.5980213.

[5] F. Peleato, M. Prabakar, and J. H. Kim, "Smart global positioning system for autonomous delivery robots in hospitals," Proc. - 29th South. Biomed. Eng. Conf. SBEC 2013, pp. 141–142, 2013, doi: 10.1109/SBEC.2013.79.

[6] H. S. Ahn, M. H. Lee, and B. A. Macdonald, "Healthcare robot systems for a hospital environment: CareBot and ReceptionBot," Proc. - IEEE Int. Work. Robot Hum. Interact. Commun., vol. 2015-Novem, pp. 571–576, 2015, doi: 10.1109/ROMAN.2015.7333621.

[7] Y. Hirata, Y. Sugiyama, and K. Kosuge, "Control architecture of delivery robot for supporting nursing staff," 2015 IEEE/SICE Int. Symp. Syst. Integr. SII 2015, pp. 345–351, 2016, doi: 10.1109/SII.2015.7404944.

[8] S. Jeon and J. Lee, "Vehicle routing problem with pickup and delivery of multiple robots for hospital logistics," Int. Conf. Control. Autom. Syst., vol. 0, no. Iccas, pp. 1572–1575, 2016, doi: 10.1109/ICCAS.2016.7832511.

[9] J. Han, H. J. Kang, and G. H. Kwon, "Understanding the servicescape of nurse assistive robot: The perspective of healthcare service experience," 2017 14th Int. Conf. Ubiquitous Robot. Ambient Intell. URAI 2017, no. July 2013, pp. 644–649, 2017, doi: 10.1109/URAI.2017.7992693.

[10] J. Liu, F. Zhou, and L. Yin, "Design of a Service Robot Cloud Service Platform," 2019 4thAsia-Pacific Conf. Intell. Robot Syst. ACIRS 2019, pp. 124–128, 2019, doi: 10.1109/ACIRS.2019.8936034.

[11] T. T. Nguyen, "Artificial Intelligence in the Battle against Coronavirus (COVID-19): A Survey and Future Research Directions," no. August, 2020, doi: 10.13140/RG.2.2.36491.23846/1.

[12] Z. H. Khan, A. Siddique, and C. W. Lee, "Robotics utilization for healthcare digitization in global COVID-19 management," Int. J. Environ. Res. Public Health, vol. 17, no. 11, pp. 1–23, 2020, doi: 10.3390/ijerph17113819.

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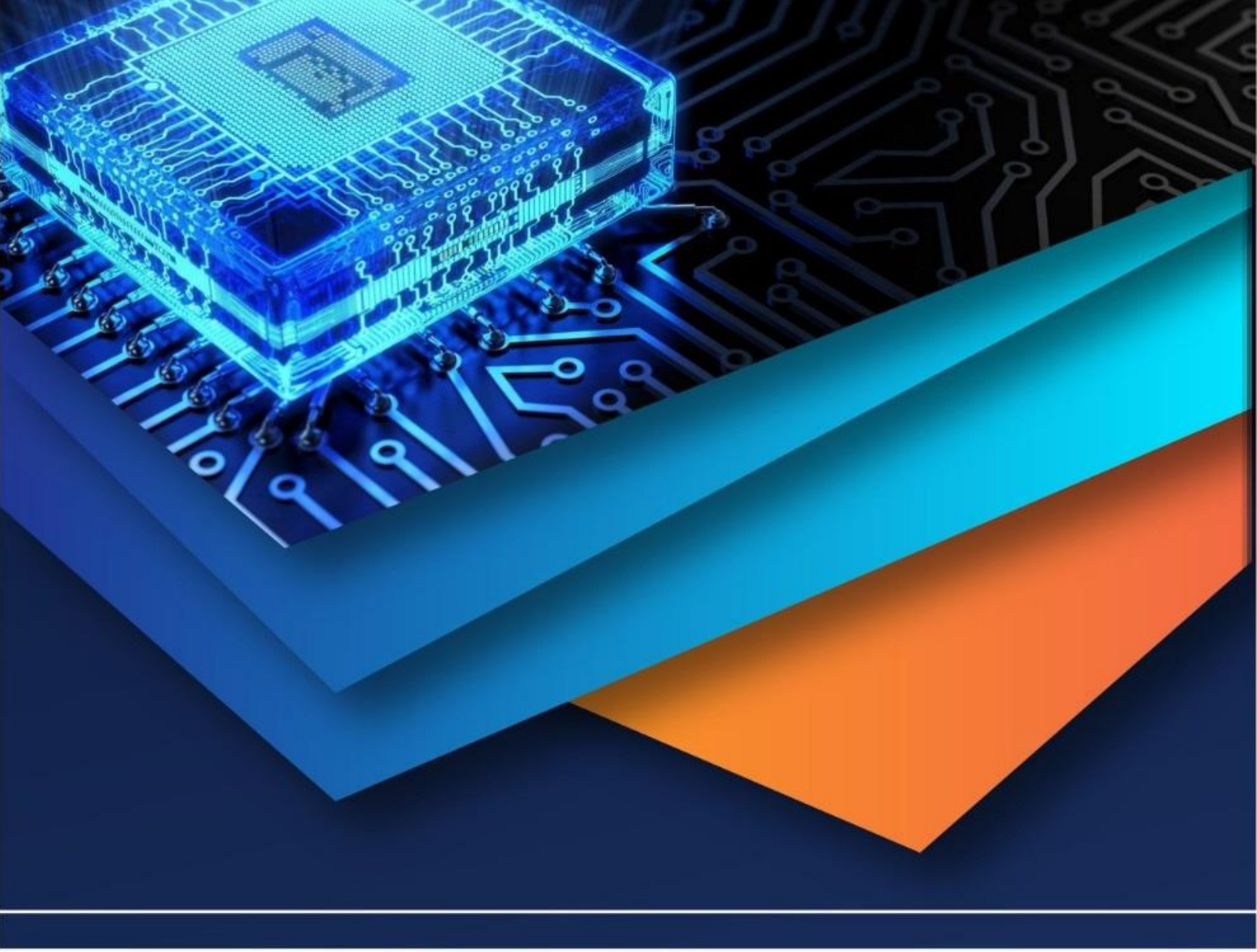

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