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Robotics: Social Robot

Vijay Lokhande[1], Suraj Shinde[2], Vanmala Kadam[3], Snehal Jadhav[4]
[1, 2]*Students,* [3, 4]*Assistant Professor, MCA Department, MCA Department, Yashoda Technical Campus , Satara*

Abstract: Social robots are is also called to 'family robot' .In a social Robots are the study which provides to the communication about them selves . it is ourselves with people, and with the environment, within the joined to its role. This paper discusses the concept of a social robot. To the Current. Social robots also used in house and health care.
Than the world's first social robot designed by MIT robotics professor Cynthia Breazeal, the Jibo robot is often described as "the world's first family robot". Social Robots are helpful in health care and domestic areas, and in education and language learning's, arts and entertainments. In this aim is to create guideline, an intended design for future developments of social robot. In this research paper the researcher has discussed about the introduction part of the social robots, applications of social robots a research has also focus on Benefits limitation and the future working of the social robots. In overall conceptual discussion of social robots the research has also focuses on future development.
Keywords: Social Robot , Robotics , Human robot Interaction , Learning , Healthcare, Education.

I. INTRODUCTION

A Social robots is a artificial intelligence system that is designed to communicate with humans and other robots. It is the robots which having an it's own laws. And which contains human interaction. Social robotics is a recently branch of robotics.
Social robots can interacts with humans it's rules and regulations which is joined to it's role. Some artificial social agents are designed with a screen to represent the head or 'face' in a constant change which is communicate with users

A. What are Social robot?

Unlike the robots that have became a familiar view in factories and warehouse, which have only limited contact with humans. Social robots are designed to communicate with us. Nowadays "People don't want to work with robots, because they're going to lose their jobs."

B. What is the use of Social Robots in Today's World?

To the some of the way to social robot are used to today include was their in taken to tutoring - provide learners with a fun is to responsive in a practice and master was new learning skills and for health care target in .

C. Use case for a Social Robots

In early in generations of the social robot in were designed for not dependent and similar tasks, such as expanding the ocean floor, providing the produce the process or helping to fulfill warehouse orders. Some of the another ways that social robots are used today include:

1) *Tutoring:* This provides learners with a fun, responsive way to practice and master new learning skills.
2) *Companionship:* In the provide to emotional support young , the elderly or disabled.
3) *Customer Engagement:* Social robots provides an possible customers with information about products and services, store hours and pricing.

II. LITERATURE REVIEW

1) Joseph E Michaelis and Bilge Mutlu are the author of "Supporting Interest in Science Learning with a Social Robot"(June 2019) in that experts are studied on basics robots .In Interaction Design and Children (IDC '19) June 12–15, 2019, Boise, ID, USA , New York, NY, USA. In this research paper education researchers and learning scientists have emphasized that impactful student learning requires than the , it was knowledge the goes simple acquisition of facts and procedure.
2) Tony Beldame and James Kennedy are the author of "Social robots for education: A review"research paper.The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim in the original Government Works. They have been shown to be effective at increasing the cognitive and affective outcomes and have achieved by outcomes equal to those of human tutoring on limited tasks.

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III. TOP 8 COMPANIES WHICH PRODUCES THE SOCIAL ROBOTS ARE AS FOLLOWS

1) Scandit
2) Knightscope
3) Furhat Robotics
4) Intuition robots
5) Intelligent Automation,Inc
6) Google
7) TNO
8) Reach Robotics

IV. APPLICATIONS IN SOCIAL ROBOT AN DIFFERENT SECTORS:-

A. Social Robots in Education Sector

The social robots in educational sector is used for teaching purposes and employing them in robotic engineering and programming courses.

Children love interacting with a robot that talks back to them, and people are seeing excellent results in happiness and communication skills for autistic children and students with learning difficulties.

B. Social Robots in Home and Food Services Sector

The Social robots in home sector is used in kitchen. It is used to provide receipes and more food information. It is also to help to make special receipes and to serve the food to your family members. In this sector mostly social robots are used for purposes

C. Social Robots in Healthcare Sector

The Social robots in health sector are used everywhere from science fiction to your local hospital. It is used in healthcare for medicinal use for help by relaxing medical people's from daily tasks , that take their time away from more pressing responsibilities, and by making medical procedur .

V. SOCIAL ROBOTS IN ARTS AND ENTERTAINMENTS SECTOR

The Social Robots are also plays an main role in arts and entertainments sector. Social robots includes different arts and also a nice entertainer for kids and elder people's.Different entertainment's like Social robots can play, dance and talk.

VI. ADVANTAGES OF SOCIAL ROBOTS

1) Social robots can be also used in the classroom settings and in the tutor and learner motive.
2) Social robots are less afraid than humans to children with autism.
3) Social robots are faster and more accurate and less noisy.
4) Those who don't have time Ex: Mothers doing chores.Then they can focus more on children and also they are also helpful in serving the food.
5) Social robots in the shops are interacting with customers and imparting knowledge about a product range, presenting a particular item or item in a certain size

VII. DISADVANTAGES OF SOCIAL ROBOTS

1) Social robots are more costly and also they takes an more time for procedur and they are placed under striker guidelines and which is not affordable to common person.
2) More training is needed for the social robots to operate the whole system.
3) Social robots need to supply of power, they need maintainence to keep them running.

This procedure is to restore the lost code or data may be time-wasting and costly.

VIII. IMPORTANCE AND NEEDS OF SOCIAL ROBOTS

Most social robots today are used to do repetitive actions or many household or workplaces jobs which considered as relax for humans. A social robot is ideal is for the various sectors like education sectors, home sectors, healthcare sectors and for retail and shops sectors. Social robots are to make in our work easy and simple to importance. Therefore, the need of social robot is most important in today's world

IX. IMPACTS OF SOCIAL ROBOTS IN EVERYDAY LIFE

A. Positive Impacts

The most important positive impact of social robots is that social robots reduces the man power. By helping the humans in every house hold works.And the safety is the most important advantage of using robotics.

Social robots contains perfection and robots will always deliver quality.Social robots makes employees happier and also maintains a job and productivity.

B. Negative Impacts

They cannot handle unexpected situations.

Social robots contains AI but they are not as intelligent as humans. They cannot think for own and also they can never develop their duties outside the pre-defined programming because they simply cannot think for themselves. And also social robots have no feel of emotions.

X. FUTURE CHALLENGES

In spite of the effective children engagement with social robots in special education, for the health of the children's with autism and old aged person's and for the home motive and working in the retail and shops.

There are following some specific challenges in improving the interaction experience and in increasing the above workouts.

1) When finding in condition for a seeking the attention with ASD (autism spectrum disorder.
2) Motivate the verbal communication during human-robot interaction.
3) Also Develops multi-robot and multi-child interaction condition in education and learning purposes.
4) It is the mostly important future challenge on to social robot is replaced by the human for the kitchen purposes to done the work in easy way.
5) In coming days social robots are most important in the businesses and various retails and shops purposes.
6) It is worth to note the above contained challenges deal with the improvement of the overall child-robot interaction ,human robot interaction specially for education ,healthcare, home, retails and shops purposes as a communication.

XI. CONCLUSION

It is concluded from the above discussion that the social robots are mostly used and important in the human-robot interaction. An the social media robots are designed in a reduced to the tasks of the human's in the different sectors.

There is much needs of the social robots in our daily life and in our daily workout of humans. The social robots it take can interacts in with humans by following social behaviors and it's rules and regulation it was to which is attached to it's role. Social robots are used in various fields for education or education,

housing and food services, health care, arts and entertainment, retail outlets and shops, and for information and communication purposes. Therefore, by this developed technologies the for development of nations and to reduces the work of humans. So, overall in this research we can include the abstract, introductory part, applications, use cases, importance and needs, positive and negative impacts, future challenges, etc.

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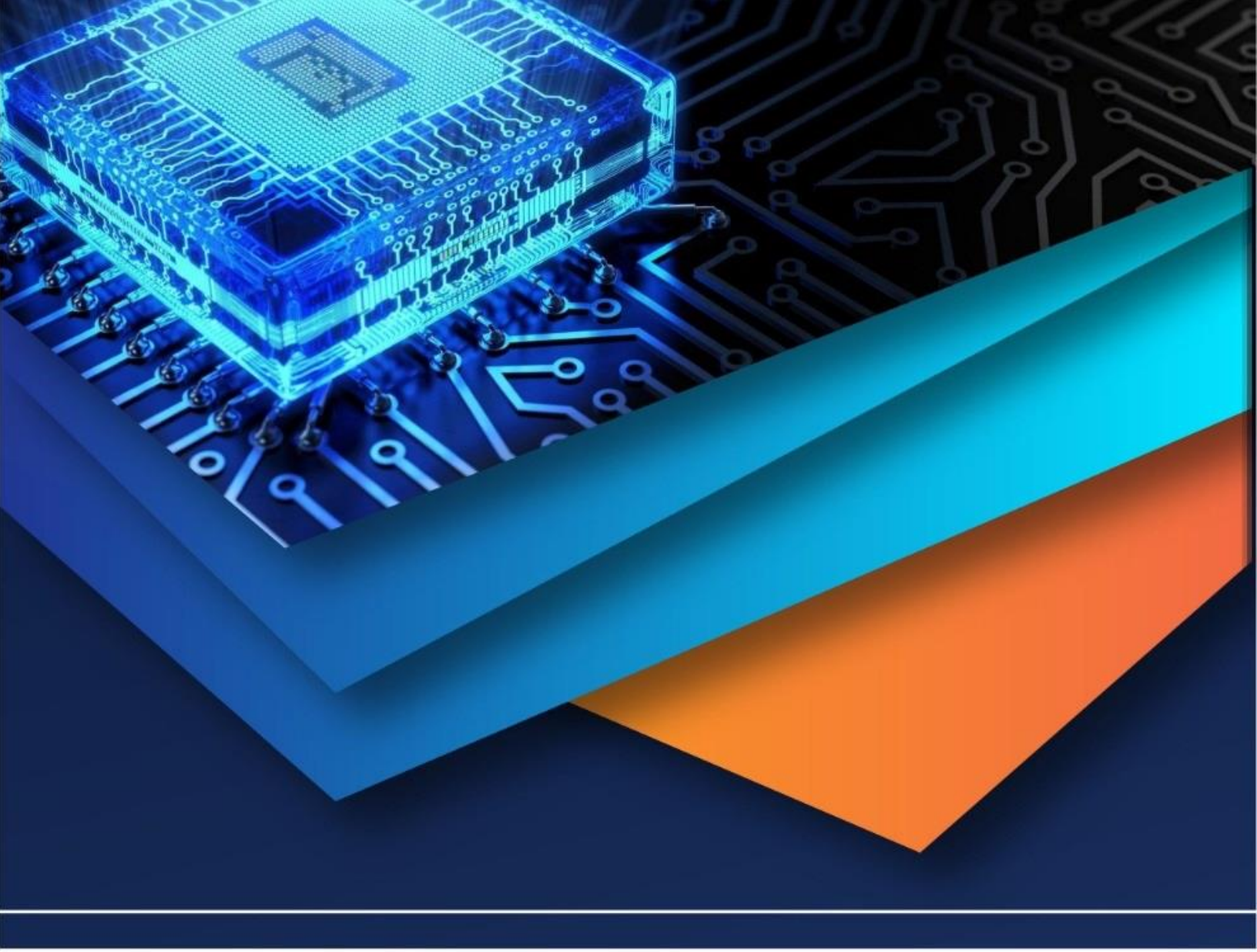
REFERENCES

[1] JosjeVerhagenApril 2019,Vol. 89, No. 2, pp. 259–295DOI: 10.3102/0034654318821286Article reuse guidelines: sagepub.com/journals-permissions © 2018 AERA. http://rer.aera.net
[2] Alemi, M., Meghdari, A., &Ghazisaedy, M. (2014). To the Employee humanoid robots English language in Iranian. International Journal of Humanoid Robotics ,11,1450022-1–1450022-25. doi:10.1142/S0219843614500224



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