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Robots: An Astonishing Human Creation

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Short Commentary

Robot is a designed device to perform a task as per the program installed during the design. It is a multifunctional and self-controlled device made especially for performing certain work unlike humans, it doesn't get tired. Robots are proof for advancements in the science and technology. Robots differ from one to the other. Dean Kamen invented first robot in 1989, inspired by Emitus Woodie Flower. The word robota or robotnik meaning slave, servant, or forced labor [1].

There are several types of robot which can be classified according to the requirement. They are Human Robots, Animal (four legged) robots, Social robots, Guard robots, Domestic robots, Mobility robot, Rescue robots, Industrial humanoid robotics, Astronaut robots, Industrial robotics.

As the development in smart sensors a water robots such as robotic fish is designed this can work in water. It is made with communication capability and sensors. This can help economical, dynamic samplers of aquatic environments. In this the composition of piezo and ionic polymer material is used to create a smart sensor [2-5].

To decrease the errors in the robust tracking system protocol, with the help of robust controller a hydraulic parallel robot is made with degrees of freedom. Method used for controller system is Non-linear dynamics method which works under multi-input multi-output system with stability of control guarantee system. To reduce the vibrations of the system nonlinear controller is used [6-9]. Parallel robots are better than serial robots because of high speed, accuracy, flexibility and stiffness.

Medical robotics play very key role in medical engineering. For prostate resection robotic arms are used and used for treating patients. The quality of work is appreciated to take a medical care in patients [10-14]. Based on wrist movements a robotic assistant arm was developed, robotic assistant as arm trainer by active and passive practices in forearm. This helps to show improvement in the fingers, wrist and hand for patients who has paralyzed after stroke [15-18].

There are some robots that can store data of patients like name, disease of the patient, tablets to be used, reports such as i.e., X-ray, CT scan and other reports. Analysis of the patient can be stored as data in the system [19-23]. Single-site surgery is also site in which robot can be used in surgery which is easy and safe. Probably this can counterpart than laproscopy.

Mobile robots are a type which can recover the disaster, exploration and military. This is mainly designed for tracking and controlling for both smooth and rough space. Based on sensors there are two types of robots intelligent robot and non-intelligent robot. Intelligent robot is a type in which depending on the control system which sense almost exactly like a human being which has eyes to see, hands and fingers to hold, objects or touch and ears to listen. Non intelligent robot is a robot which cannot receive information through sensors it is follows already programmed in the system. The major difference between intelligent and non-intelligent robot is sensors [24-27].

Guard robots are for security type devices that are physically used to access the sensitive information which can protect data or information in the system. Unauthorized persons can be restricted till the authentication is proved [28-30].

Hoping for the future to develop the robot which is useful to minimize the pollution and maintain the environment pollution free. The development in the robots should not make an individual lazy in the work [31]. Accuracy should be maintained such that the robot is better than the human beings. Robots should also focus to rescue from bomb explosives, which may cause life threat to pupil. Robots should be re-programmable, multifunctional manipulator should designed to move material, part, tools or specialized device through various programmed motions for the performance of a variety of task [32].

Computational knowledge and application of artificial intelligence are abundant in literature, where various examples of applications are available for bioinformatics studies [33-38], medical robotics [39] and in other relevant subjects. Higher level of programming skills along with hardware information is mandatory to develop such excellent applications which render us a wonderful service in all sector of life.

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