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Editorial

Significance of Robotics in Twentieth Century

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DESCRPTION

Robotics is a field of study that deals with the design, manufacture, and operation of robots. The purpose of robotics is to emerge intelligent devices that can help people in a number of ways. Robotics can arise in a number of different forms. A robot can be human-like or lead to formation of a robotic application like Robotic Process Automation (RPA), which mimics how humans interact with software to execute repetitive, rules-based tasks. While the discipline of robotics and research into the potential employs the uses and functionality of robots has evolved significantly in the twentieth century, the concept seems far from new.

Robots are commonly utilized in areas such as automobile manufacturing to perform simple repetitive tasks, as well as in industries where workers must work in hazardous environments. Artificial intelligence is used in many parts of robotics; robots may be endowed with the equivalent of human senses including vision, touch, and the ability to perceive temperature. Some are even capable of simple decision-making, and current robotics research is focused on developing robots with a degree of self-sufficiency that will permit mobility and make decisions in an unstructured environment.

Today's industrial robots do not really resemble like humans; an android is a robot which features like a human. Industrial robots, like many other forms of robots, are being utilised to complete tedious jobs. Robotic arms, robotic exoskeletons, and classic humanoid robots are all possibilities. A collection of computer programming and algorithms, a remotely operated manipulator, actuators, and control systems-action, processing, and control-determine the function of a robot or robotic system.

The following are some further robotics applications

Artificial intelligence: The simulation of human intelligence processes by machines, particularly computer systems, is known as artificial intelligence. Expert systems, natural language processing, speech recognition, and machine vision are all examples of AI applications.

Data science: For organizational decision-making, strategic planning, and other reasons, data science is the study of extracting useful information from data using advanced analytical techniques and scientific concepts. For organizations, it's becoming increasingly important: Firms can use data science insights to improve operational efficiency and explore new business opportunities, and strengthen marketing and sales endeavors, among other things. They may provide you with a competitive supremacy over your competitors in the end.

Nanotechnology: Nanotechnology is a phrase used to describe areas of science and engineering in which phenomena occurring at nanoscale dimensions are used in the design, characterization, manufacture, and application of materials, structures, devices, and systems.

Although there are many examples of structures with nanometre dimensions (hereafter referred to as the nanoscale) in the natural world, such as essential molecules in the human body and food components, and although many technologies have inadvertently involved nanoscale structures for many years, it has only been in the last quarter of a century that it has been possible to Within this size range, actively and deliberately changes the molecules and structures. Nanotechnology is distinguished from other fields of technology by its ability to control objects at the nanometre scale.

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