**Intelligent robots in the future**

The robot is a kind of automatic machines, the difference is this machine have some person or creature similar to the intelligent ability, such as perception, planning ability, motor ability and synergy is a highly flexible automation machine. In recent twenty years, because of the development of computer technology, electronic products and biological genetic engineering technology in big strides, "intelligent robot research and development boom of the walked out of a from the laboratory professionals become a comprehensive scientific research ability development activities.

Robot research from the beginning is the human-like, so there are mechanical hand, the development and production of mechanical arm, but also in order to replace to do the human beings` work and the work of human beings can not complete. But in recent years, the development of the robot is not only more and more optimized, but also covers a lot of fields, the application of the category is very broad. To a great extent, the used in space exploration, lunar rover, deep-sea detector, the exploitation of offshore petroleum shuttle mechanical arm, ranging from micro mechanical operation, life monitor and so on. Military use is changing, from bomb disposal robot, to remove the robot to the chariot of unmanned aircraft and automation, there are even predict future wars might like Star Wars as. As for industry, agriculture, medicine, genetic biological industry, cultural industry, telecommunications, energy development, the large number of robots will due to the industrial revolution.the department head of the British telecommunications company future department had for accurate prediction of SMS, spam and Internet search engine is known, in the recently published technical prospect prediction of fifty years , there are several is about robots. The robots of the future will develop into three directions:

**First, More closely bound up human life , and provide more services as elements**

Twenty years later, sweeping home , nursing care work cleaning work or the elderly , may be completely replaced by robots. San Francisco, US hospitals have begun to use a robot to send medicine to patients , dispensing service. President of the United States ay robot 's interview , said the company's production of household cleaning robot products, in 2002 only $ 1.2 million in sales in 2012 have soared more than 50 times . Also, fully automated home , driving without auto car , etc. , it is unable to count or to make estimates.

**Second Big trend bionic , biological properties**

With interest , to manufacture biological robot dog , cat , fish and other animals. For example, Japan's Mitsubishi Heavy Industries subsidiary Ryomei Engineering successfully developed mechanical golden fish " goldfish Tiger" 1 meter long and weighs 25 kg , is a big giant fish can swim in the water automatically , can help monitor and collect the security of the bridge the case of the fishing season , monitor river pollution.In addition , the film " Jurassic Park" dinosaur robots are also examples. Such bionic robot has also been widely used for reconnaissance wrecker , transfer military intelligence , even in the invisible enemy means to go up .University of Hawaii , featuring an underwater robot research center , has a considerable scale .

**Third The most important development is the humane**

International Exposition called "Robot Expo held in Japan, which can also be seen in Japan's industrial advantages and the results. In the exhibition, reception, cleaning work of the General Assembly, guard work, etc., mostly in the form of robots appear and replace. Also held during the fair a number of human and robot-related activities, the most striking of Artificial Intelligence and humane robot performance, such as a female robot reception can listen, speak six languages, facial muscles are also activities. University of Tokyo announced in August this year, they have developed a simulation of human skin, as people can feel as hot and cold, pain, reaction temperature, and even some who did not have skin functions can be set, the life of this fake robot It is a big step forward.



At the turn of the century, the biological genetic engineering for "human cloning" and cause ethical, legal and ethical issues of controversy, "human cloning" whether the advent of is still unknown, but research and development of robot is being replaced by the, the closer the human nature to pursue the goal. It is also the emergence of new terms, such as artificial intelligence

In conclusion, Advanced industrialized countries in the world have paid great attention to research and development of robots, Practical and industrialization trends, a lot of money, manpower, improve the environment and indicators, particularly attach importance to training of young people interested in the future of this science, they attract investment, to form a talent echelon, forging a new industry team. With the rapid development of science and technology, future robots will be more intelligent. Robot technology integrated multidisciplinary development results represent the forefront of the development of high technology, it continues to expand in the lives of applications is causing the international community to re-recognize the role and impact of robotics.

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