Homework: Talk about service robots

As for the existing service robots, What I know about it is that They has large-scale application in sweeping the floor and entertaining people. What’s more, some are even used to cook, fetch things, perform shows, educate children and so on.

But the most important problem for the existing service robots is that they lack flexible human-computer interaction and advanced artificial intelligence algorithm. At present, most of the service robots are controlled by fixed programs and remote controls. The service robots controlled by smartphones, computers and people’s voice and movement are supposed to be developed further. In addition, most of the existing service robots are still very dependent on humans’ instruction due to lacking the advanced artificial intelligence algorithm. Or more direct to say that these robots’ algorithm is only suitable for the robots in some particular environments. When the environment becomes a little different, the algorithm maybe fails and the robots with it can’t function properly.

To be honest, some existing service robots are already designed very perfectly in some particular areas. Some are equipped with high resolution cameras but with very primary visual recognition algorithm while some are equipped with agile mechanical arms but with a bad control system. However, if put the perfectly-designed areas together, the cost rises. That’s also a big problem for the existing service robots.

When it comes to my ideal service robots, I have three points about it to say.

Firstly, my ideal service robots should be able to easily connect with other service robots, computers, smartphones, cars, electric furniture, house and so on with 5G or 6G signals, which can lead to convenient service.

Secondly, these service robots are equipped with advanced artificial intelligence algorithm, which can make them recognize people, animals and other things, understand what people say, organize language and speak, think and plan and so on. With the intelligent algorithm, the service robots can have an easy interaction with people and provide people with convenient service.

Thirdly, these service robots can gather more direct information from the environment. What’s the key to gather direct information? It’s the all kinds of sensors of good quality. From the high resolution cameras to clear microphone, the robots’ sensors should all be cheap and sensitive, which is the guarantee of the accurate service.

Fourthly, compared with the existing service robots with the same function, the cost of my ideal service robots should be much lower, which partly depends on the development of hardware manufacturing technology and materials.

For example, a steward service robot I dream of should be like this. The robot only obey the instruction of its master, and can do some easy housework. It can remind its master to get up, brush teeth, eat dinner, take an umbrella before going out in the rain. And also it can protect its master and his or her belongings. If a thief enters the house, it can quickly find the thief, give an alarm, protect the house and call the police.