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THE INTERNET OF THINGS

Imagine a situation where all appliances "know" each other and cooperate closely in order to benefit their owners. Devices equipped by artificial intelligence, helping their owners in everyday life, simplify and make thei life comfortable. It is not a myth or a fiction, it is the newest concept called "The Internet of Things."

The Internet of Things is the concept of communication network of physical or virtual objects ("things") that have the technology to interact with each other and with the environment, but can also perform certain actions without human intervention.

The main idea of the concept is the following: all household items, products, components of manufacturing processes, all the devices in your home, in the car, on you etc., have been equipped with built-in computers and sensors able to process information coming from the environment, share it and perform different actions depending on the received information.

This will give users a lot of opportunities: washing machines operated from the office; refrigerators sending emails that the orange juice is over; cars driven without the aid of people; devices entertaining pets in the absence of the owners; ovens remembering the hundreds of recipes and a lot of other amazing concepts and startups.

The Internet of Things can be divided into three segments: mobile, consumer and industrial ones. That is, each of these categories brings together devices of an industry by organizing a certain network of devices performing the same task.

The Internet of Things can cause huge changes in everyday life, giving ordinary users a whole new level of comfort. But the elements of such a system should be adequately protected from unauthorized interference using reliable encryption algorithm. Otherwise, they can bring harm, giving cybercriminals a loophole to undermine information security. As soon as the computer is connected to the network, other people can establish control over it and the device will continue to dutifully carry out their instructions. And since things with embedded computer stores a lot of information about their owner, including exact location, access to such devices could allow an attacker to commit a crime.

Thus the described concept with further development and integration into the daily life of users, as well as further conglomerates of computer industry investing has a great future. Implementing original ideas, humanity will get a new level of

life. But among the many advantages there are some significant shortcomings. One of the worst is the possibility of unauthorized access to devices and their resources.

LITERATURE

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