Computer security in our life

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The world has already switched to digital electronics. It is difficult to imagine our life without electronic devices. Electronic devices have completely changed our lives. Thanks to these devices our life has become simpler. Thanks to electronic devices, people began to save their time. Before the electronics were available only to rich people, and now it is available to everyone. Electronic devices have become so popular that already there are people who depend on them. A lot of information can now be stored in the electronic devices. It is very convenient because there is no need to hold all information in the head. However, there is the problem of protecting this information. We want to protect our data in the computer or phone from hackers. For example, if to speak about cash cards then information security is very important because the user of the card can lose money. Or if we talk about computers. There is a problem of infection by computer virus. If your computer is infected with a virus, it will be broken. Therefore, in large and small companies, computer security has an important role. Because Computer security today is very important in our lives. Every day we use digital technology, not knowing that it can be hacked. But thanks to experts of computer safety, we can be quiet for our devices. Where train in this specialty? In DSTU graduates of computer security can easily cope with any task. Here students study the Analysis of safety of computer systems, Mathematical methods of information security, Safety of the distributed computer systems and so on.

Now let's talk about what is computer security. Computer safety is a data protection on your computer from various casual or intended removals of data from local disks. Also to problems of computer security concerns the stability of the software and operating system performance of your computer. Computer security threat can be various: various computer viruses, the vulnerabilities of the post programs, hacker attacks and attacks and so on. Swindlers think out all new and new systems of theft of information each time. The information security problem in the military sphere is especially important. All modern arms are based on computer technologies. The loss of sensitive data can lead to disaster. Terrorists may try to obtain information about the location of military forces in the country. They can also obtain information about the secret development of new weapons. A computer system monitors the safety of our borders. Therefore, our country needs specialists of high class.

Military sphere is not the only area that needs computer security. For example, the transport system also depends on computer security. This means that there is data on the transportation of secret freights. This data needs to be protected

Another important area of protection of computer data is a space. Our country has far promoted in this area. Scientists are developing new technologies in the field of space. These developments also need to be protected.

There is another area that requires a high level of information security. It is a banking system. Here, data protection plays a very important role. Data loss can cause huge damage

And that's not the whole list of areas that depend on information security.

Probably, there is no area in the world, who do not need the protection of information. Therefore it is very important to train high-level professionals who will be able to protect our information systems.

Next, let's talk about the threats in computer security. The main threat to computer security is computer viruses. The virus is a clever program which independently registers in your computer and performs certain operations which have been set by hackers during creation. Computer viruses on the computer try to hide the presence and carry out certain operations. Viruses operate at high speed, start looking for various vulnerabilities on the computer. To protect itself from different viruses, you should install the software called antivirus.

Now let's talk about information security. Information security is the defense of the confidentiality, integrity and availability of information. Confidentiality is ensuring

that access to information only to authorized users. Integrity is ensuring reliability and completeness of information and methods of its processing. Availability is ensuring access to information and the related assets of the authorized users as required.

Experts of computer safety study the analysis of safety of computer systems, mathematical methods of information security, safety of the distributed computer systems, development of the protected software, safety of high-performance computing systems, safety of the software of mobile systems, information and analytical and technical expertize of computer systems, information security of objects of informatization on the basis of computer systems

Now let's talk about the development of our specialty. First, the information security system was developed for the needs of the military. Strategic data which belonged to defense capability were so important that their leak could lead to huge human losses. Accordingly, computer security appealed to the experience of cryptography, that is encryption. There was a special program, allowing to automate the process of encryption and decryption. Later, when need of information security has extended to other spheres, it became clear that enciphering complicates and slows down transfer and use of data. But with the development of computer networks and systems began to appear other tasks. Over time, there was a classification of secrets that must be protected. They made six categories: state secrets, commercial, banking, professional, service, and personal data.

In conclusion, I want to say that my specialty is one of the most popular specialty in the world. In addition, our specialty can be very useful in a number of areas.

Internet resources

- <u>www.ucheba.ru</u>
- <u>http://www.ultimate-mails.com</u>
- <u>http://dic.academic.ru</u>

• <u>Alan Conheim — Computer security and cryptography</u>