

Thus, the number of megapixels is only one parameter of a complex device camera system. Matrix type and optics quality are also extremely important. In addition, much depends on the specific implementation of the smartphone camera by a certain manufacturer. Supporting manual settings, for example, will somehow improve the quality, for example at night, you can shoot with a tripod lowering the ISO to 100 (or 50 in some smartphones) with great exposure. This will allow to obtain night shots with less noise, having the average quality matrix. In addition, shooting in RAW format – storing images as digital negatives, which can be processed and improved on a computer after shooting – often (not always) turns out to be useful.

*Scientific supervisor: Tereminko L.H.,
Senior Lecturer*

UDC 004.056 (043.2)

Kioumji Y.

National Aviation University, Kyiv

THE CONCEPT AND IMPORTANCE OF COMPUTER SECURITY

Computer security is a type of security that people apply to computing devices such as computers, smartphones, tablets and other computer technologies. This field includes all the ways and types of processes, which digital devices and information are protected from unauthorized use or change. This field includes physical security to stop theft of property and on a data level to stop from stealing or viewing some sensitive information. It is sometimes called “cyber security”. Computer security can also be defined as the process of applying security preventive measures to ensure confidentiality, availability and integrity of data. It also assures protection and security of assets or property, which the data or the information is saved on them. The aim of computer security is to protect information both in movement through computer networks and at rest on the devices.

Computer security involves the process of protecting computerized devices against intruders from using your device for personal gains. For example, stealing your sensitive information and sell it to people who can use it against you). Computer security is a branch of Information Security and it includes several security measures such as software like firewalls and antivirus programs.

Computers are now used practically in all industries. Currently, most computerized devices come with a built in firewall software, but this is not enough to make them 100 percent secure and dependable to protect the data. There many different ways of hacking into computers such as through a network system, download software from unsafe websites, clicking into unknown links, electromagnetic radiation waves, etc. However, computers can be very well protected through well built software and hardware. There are many actions that

can be taken to make the security of the computer stronger. Such actions are called countermeasures. Countermeasures are processes or devices that can stop the threats to a computer or network. A threat is a process that may be malicious and that can be harmful to the information of a computer or network. Examples of countermeasures are personal or application firewalls and anti-virus software. The field of computer security has a growing importance because of the increasing use of computer systems and the Internet.

The importance of computer security:

Information security is one of the most important aspects of integrated security. The information security system must be able to withstand a variety of attacks, both external and internal, automated and coordinated attacks. Sometimes the attack lasts a split second, sometimes probing vulnerabilities is conducted slowly and stretched on the clock, so that suspicious activity is almost unnoticeable. The importance of information security is explained due to two main reasons: the value of the accumulated information resources and the dependency on information technology.

The destruction of vital information, theft of confidential data, outage due to a failure are all results in major economic loss and damages the reputation of the organization. Modern information systems are complex and, therefore, dangerous in themselves, even without malicious activity. Finding new vulnerabilities in software, we have to take into account a wide range of hardware, software and numerous connections between components.

*Scientific supervisor: Murkina N.I.,
Senior Lecturer*

UDC 004.8:811.111 (043.2)

Komar A.A.

National Aviation University, Kyiv

THE ADVANTAGES AND “SMART HOUSE” SYSTEMS’ MAIN CHARACTERISTICS

Today systems of "smart house" or in other words, home automation, allow us to do a lot, from control of light and temperature to control the sound of audio systems and home security and family, using ordinary mobile devices.

For the first time the concept of "smart home" appeared in the 50s of last century. Primal system that can control the situation in the whole house, is the technology Java. Developers of this technology tried to implement it in domestic appliances, thereby making them more "intelligent."

This system coordinates all technical devices that are in the house. Moreover, the control system can be carried out by remote control, and remotely, using modern devices: Iphone, smartphone, tablet, and so on.