



ISSN: 2377-8970 (Online)

Asia-SAME Transactions on Engineering Sciences (ASTE)

DOI: <http://doi.org/10.7508/aste.01.2021.04.05>

ARTICLE

RESEARCH OF COMPUTER ENGINEERING'S APPLICATION AND ADVANTAGES

Eric Sandgen*

Community School of Naples, Virginia, USA

*Corresponding author: sandgen@hotmail.com

This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

ARTICLE DETAILS

ABSTRACT

Article History:

Received 1 March 2021

Accepted 7 June 2021

Available online 13 June 2021

In recent years, with the continuous popularization of Internet technology and the rapid development of computers, computer engineering can realize the effective transmission of information and promote the development of network and E-commerce. Computer engineering is widely used. The openness and sharing of the information platform naturally inevitably lead to some related security problems. The occurrence of a series of problems such as virus intrusion, hacker attack, and data loss make the information platform risky. To this end, the application of computer engineering is deeply discussed, and the application advantages of computer engineering are analyzed, aiming to ensure the safety of computer application, and give full play to its advantages, facilitate people's life, and achieve fast, convenient and efficient results.

KEYWORDS

Computer engineering, problem, advantage, application.

1. INTRODUCTION

At present, the fastest growing field is computer technology and computer network technology. The computer network technology is mainly based on the connected virtual pictures with resource sharing as the main purpose. So far, computer technology and computer network technology have been widely used in various fields of human society development, and gradually become the booster of social development. Facing the advantages of computer technology and network technology in people's life and production, it is necessary for us to analyze and conduct in-depth research on the application of computer engineering.

2. ANALYSIS OF RELATED PROBLEMS IN COMPUTER ENGINEERING APPLICATION

With the rapid development of modern self-confidence and technology and the popularization of network technology, the application of computer engineering is becoming more and more extensive. The safety of computer engineering application workers has gradually attracted widespread attention.

3. VULNERABLE TO INTERFERENCE AND INTRUSION BY VIRUSES OR HACKERS

In the application stage of computer engineering, it is extremely vulnerable to attacks by unknown users, that is, malicious attacks by hackers or interference from viruses, which has a negative impact on the application of computer engineering. Therefore, computer security has become our primary concern. The main body of computer security protection should protect and manage the physical composition, data, and application functions in computer engineering applications. Generally speaking, computer engineering shows good physical security

in the application stage. The electromagnetic radiation formed by the host computer and its peripheral equipment is very obvious, which requires the control of whether the computer entity conforms to the safety standard. The software system of computer engineering application should reflect good storage and management functions in application, and should be able to prevent illegal access to various types of data by different types of users. In addition, the computer should also have high-quality protection and storage capabilities, which can effectively prevent users from operating illegally within the scope of operation regulations.

4. IT IS DIFFICULT TO HAVE A BALANCE BETWEEN THE SECURITY OF COMPUTER ENGINEERING APPLICATIONS AND THE CONVENIENCE OF COMMUNICATION

The security level of the computer can be divided into different multi-level security systems such as low-level, final-intermediate-level, and high-level, and different levels of security protection strategies can be formulated according to the importance of different information. The main characteristics of security are confidentiality, integrity, and availability. The so-called confidentiality mainly means that network resources can only access and call the database through authorized entities. The information shall be kept in good comprehensiveness and integrity during transmission and storage, and shall not be modified arbitrarily by unauthorized users. The so-called availability mainly refers to the operability of all kinds of static information, and the visibility of dynamic data information content. There are still many loopholes in the computer network system. For malicious attackers, malicious attacks can be carried out through emails, web page password entry, and personal information filling. Web servers and browsers cannot achieve their security. In addition, many people write computer engineering applications as modifications to new programs. The end

result of doing this is a lot of similar security holes.

5. SIGNIFICANT ADVANTAGES OF COMPUTER ENGINEERING APPLICATIONS

The continuous improvement of computer network technology has had a huge impact on the application of computer engineering. The scope of application of computer engineering is getting wider and wider. The application of computer engineering must be carried out according to the advantages of computer technology and on the premise of ensuring the security of computer network technology.

6. APPLICATION OF COMPUTER ENGINEERING SYSTEM IN SELF-CONFIDENCE AND SYSTEM

The popularization of computer engineering and network technology provides strong technical support for the construction of confidence and system. This is mainly manifested in that computer network technology provides a new transmission protocol for the development of confidence and systems, which ensures the transmission efficiency of information systems. Secondly, computer network technology and computer engineering provide a powerful database technology for information systems to ensure. Third, computer engineering and network technology provide technical guarantee for the effective transmission of confidence and system. With the support of computer engineering application and network technology, confidence and overall performance of the system will be comprehensively developed and improved [1].

7. ADVANTAGEOUS APPLICATION OF COMPUTER ENGINEERING AND NETWORK TECHNOLOGY IN EDUCATION AND SCIENTIFIC RESEARCH

As far as the current range of computer engineering applications is concerned, education and scientific research is an important application field that combines computer network and computer engineering applications. With the support of strong network technology, education and scientific research have achieved unprecedented development prospects. For example: the construction of computer engineering and network technology in distance education system. With the continuous development of education in our country, in order to more effectively expand the scope of education and comprehensively improve the overall effect of education in our country, the organic combination of computer engineering and network technology has realized the comprehensive construction of distance education network [2]. This application not only enriches the means of education, and played a positive role in promoting the effectiveness of education. From the perspective of the current system construction of distance education in our country, it has become an important form of future education. Another example: the application of virtual analysis technology in education and scientific research technology. As far as the actual development of education

and scientific research is concerned, there are many studies in the field of educational research and scientific research that require statistical analysis of data. It is difficult to achieve the expected analysis effect if only relying on traditional data analysis techniques. However, the virtual analysis technology produced after the combination of computer engineering and network technology has effectively improved the effect of data analysis [3].

8. APPLICATION OF COMPUTER ENGINEERING AND NETWORK TECHNOLOGY IN PUBLIC SERVICE SYSTEM

At present, in the social public service system, in order to improve the management efficiency of the public service system, the effective combination of computer engineering and network technology has been widely used. In the traditional public service system, most of the data is completed by manual input, not only the overall service level is not high, the service efficiency is low, but also there is a big hidden danger of data security. Relying on the strong support of computer engineering and network technology, the public service system has obtained advanced technical support. Computer engineering and network technology have changed the traditional mode of public service management [4].

9. CONCLUSION

With the rapid development of computer engineering application and network technology, computer technology has increasingly become an important booster for social development. The application of computer engineering in various fields provides technical support for economic development and social progress. Therefore, it is necessary to increase the promotion of the application of computer engineering on the basis of a correct understanding of the application of computer engineering to ensure the comprehensive application of computer engineering.

REFERENCES

- [1] Dai, Y. 2011. Computer network security management technology and application. Information and Computer (Theoretical Edition), (11): 106-113.
- [2] Liu, X. 2013. On the application and development of computer network technology. Information and Computer (Theoretical Edition), (1): 28-35.
- [3] Canizares, C. A., Faur, Z. T. 1997. Advantages and disadvantages of using various computer tools in electrical engineering courses. IEEE Transactions on Education, 40(3): 166-171.
- [4] Dabbagh, M., Hamdaoui, B., Guizani, M., Rayes, A. 2015. Software-defined networking security: pros and cons. IEEE Communications Magazine, 53(6): 73-79.

