Application of AI Technology in the Field of Film and Television Media

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Abstract: In recent years, AI technology has been developing and progressing continuously, and has been widely used in the fields of images, games, speech recognition and so on. The creation of film and television art is closely related to the aesthetic feeling of art itself. Film and television art is a kind of creativity, which needs the audience's participation and trust. At present, AI technology has been initially applied in the film and television media industry, reshaping the working mode of the film and television media industry. AI technology has been widely used in the field of film and television media, such as image and speech recognition, which has played an important role in saving film and television creation cost and improving work efficiency. The application of AI in the field of film and television works has greatly changed the way of film and television creation. On the basis of summarizing the research hotspots and progress of AI technology in the art field, this paper puts forward some suggestions on the application of AI technology in the field of film and television media, and provides some reference opinions for the further development of the field of film and television media in the future.

1. Introduction

The creation of film and television art and the beauty of art are inseparable. Film and television art is an embodiment of creativity, which needs the participation and trust of the audience. With the continuous development of sci & tech, the application of artificial intelligence (AI) technology in all walks of life has made breakthroughs, and the intelligent work mode has greatly improved the work efficiency [1]. For film and television art, the greatest impact of AI is the use of special effect technology, which has unprecedentedly improved the artistry of film [2]. The application of AI in the field of film and television works has greatly changed the way of film and television creation. Some lenses can be made by computer, which is in strong contrast to the traditional film and television lenses that can only be completed by shooting [3]. The production of film and television works of art includes the secondary production process participated by the audience. With the development of AI technology, this process will become more prominent [4]. In film and television art production, with the help of AI technology, the production process can be comprehensively optimized to ensure the connection between AI technology and the media field [5]. With the rapid development of AI technology, media technology has become a new growth point on the existing basis, which can realize the subconscious development and take it as a new continent with unlimited imagination space.

With a large number of AI products put on the market, people know more and more about AI. AI has made outstanding achievements in many fields and helped open up a broader world in other fields. With the progress of the times, film and television media education began to show traces of industrialization. Especially in recent years, this major has become the leading major in the enrollment of many colleges and universities, resulting in the high enrollment heat of film and television media related majors, which has seriously affected the benign development of film and television media education [6]. The application of AI in the film and television industry not only provides new creative technology for film and television creation, but also provides rich media and carriers for the dissemination of film and television works. More importantly, film and television creation can protect traditional culture with the help of AI [7]. AI technology, as a special product of social media development, can not only build an intelligent media information society, but also penetrate into the media research field, and guide the research of film and television media to

develop [8] in the direction of "Internet plus education". This paper analyzes the powerful role of AI technology in the field of film and television media, studies the possible risks in the process of specific application, gives several practical application methods, and makes an innovative research on the intellectualization of film and television media education.

2. The performance of AI in film and television creation

2.1. Emotional expression of AI in film and television creation

The key to the success of a film and television work lies in whether the film and television work has true feelings and can make the audience feel the same way. There are many ways to express emotions in film and television works, such as the emotions expressed by the director through the lens language or the emotions expressed by the story itself. Film and television creators began to extend more styles of works by using AI technology, and film and television works reached a certain new height through the creation of AI. These are enough to prove that the powerful AI technology has greatly promoted the innovation process in the field of film and television creation. Workers in the field of film and television creation can use AI technology as a starting point to create innovative film and television works, and can also use AI technology to optimize the quality of old film and television works [9]. A film and television work can't be regarded as a truly excellent work if it only gets box office and ratings through luxurious cast and performance scenes. Although AI can't fully express human emotions, at present, AI technology has collected and simulated human emotions through technologies such as big data calculation algorithm and analysis. Film and television creation through AI can provide a more favorable resource pool for emotional injection of film and television creation.

2.2. Cultural expression of AI in film and television creation

In the creation of traditional film and television works, due to the backwardness of basic equipment and production technology, many ideal effects can not be achieved. However, the emergence of AI provides new creative methods and ideas for the creation and development of film and television works. The film and television creative team can create ideal film and television works with the help of AI technology and expression techniques, so as to meet the requirements of more people for film and television works. The field of film and television media is the field of human creation, which is based on the creator's personal character and inner emotion, and embodies the creator's unique efforts. For viewers, the appreciation of film and television media needs to be based on personal life experience and emotional accumulation [10]. At present, due to the imperfect development of AI technology, many excellent traditional cultures have not been displayed perfectly. With the further development of AI technology, some endangered or even extinct traditional cultures will reappear in front of the audience. Everyone's perception of film and television media works is different, and the same work has different perceptions in different people's eyes. Therefore, all the works in the field of film and television media are based on human emotions. However, in this activity based on human emotions, it is difficult to form data for computer machine learning, which leads to the failure of AI to successfully complete the film and television media works that can make the audience agree.

3. The development direction of film and television works in the era of AI

3.1. Industrial intelligence technology is the technical basis of film and television creation

The application of virtual technology in AI technology has solved many problems existing in film and television creation, and thus the role image, special effects and picture background in film and television works have been improved. The emergence of AI provides extremely rich technical basis for film and television creation, which not only makes the content of film and television works more intelligent, but also makes the presentation of film and television works more diversified. The powerful algorithm of AI has reached the field of film and television works creation, and it will

become a weakness because it cannot produce a story like that created by film and television producers. This is also a powerful reference for future film and television creators to improve their creative ability. Creating works with personal stories and personality will never be out of date, and film and television creators will bring more effects by telling personal stories. AI data system provides creators with a variety of choices, mainly reflected in lyrics creation and song music style, and the beat and length of songs can be adjusted and configured again. Using AI technology, we can find creative resources in music database and accurately collect suitable music, so as to create songs. With the application of AI technology, not only can the existing minority cultures and traditional Chinese cultures be recorded, but also some lost cultures can be truly restored. AI technology not only provides experts and scholars with the technology to study traditional culture, but also provides the foundation and technical conditions for traditional culture research for film and television creation industry.

3.2. AI provides a communication channel for film and television works

AI itself is a record carrier based on high-end technology, so it is of great significance to record and protect the traditional culture of our nation. When we see the paintings, music songs and film and television works generated by deep learning algorithms, we may guess that perhaps one day, AI technology will completely replace the work of art creators. The application of AI technology in the field of film and television media can further promote the innovative development of film and television works, which is also an effective way of media communication and form innovation. Before the advent of the AI era, although TV and computer have been used to play movies and TV works, their playing ability and playing range are still very limited, and the playing channels of movies and TV works are not rich. The application of AI not only improves the functionality of the broadcast carrier of film and television works, but also enriches the communication channels of film and television works. The AI-based animation movie character animation production process is shown in Figure 1.
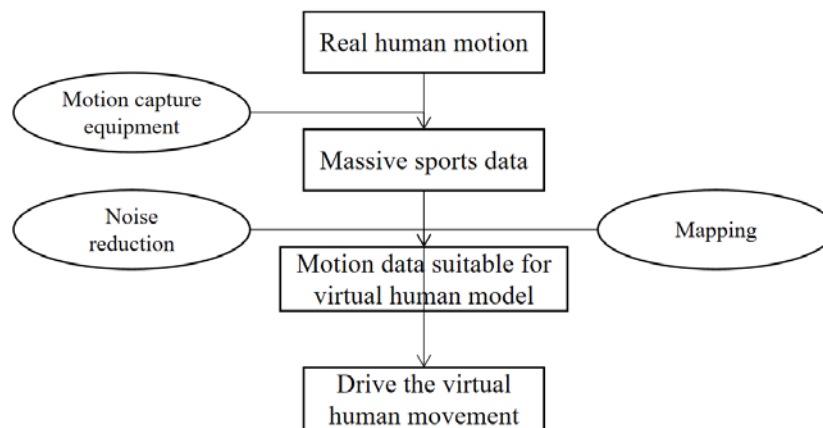

Figure 1 Animation production process of animation movie characters based on AI

Under the influence of modern sci & tech, the field of film and television media has achieved common development in many aspects. Using AI technology to add more innovative elements to the background of the story through in-depth study of many film and television works. In terms of the function of the media for playing movies and TV works, when traditional movies and TV works are played, the audience can only watch passively, unable to choose favorite movies, unable to change the playing schedule at will, and unable to communicate at will. However, with the advent of the AI era, all these scenes have become a reality. The artistic creation and aesthetic standards of film and television works are closely linked. Therefore, film and television works, as a form of artistic expression, need the audience to get emotional resonance and find value from the works, and the creators of film and television works need to add essence to the film and television works according to artistic requirements.

4. Conclusions

The intelligent development of film and television media education is an inevitable trend in the era of big data. The application of AI technology in film and television media education can greatly promote the transformation of education mode. The development of AI technology has greatly improved the efficiency of film and television works creation. It is the trend of the times to use AI technology to innovate film and television works and media communication channels and forms. In the application update of AI technology in the media field, through brand-new technical forms and operation methods, it can be ensured that AI can assist labor to the greatest extent and improve work efficiency without replacing the necessary labor cost. In the process of applying intelligent technology, it not only creates a lot of opportunities for the development of film and television media teaching, but also makes the intelligent film and television media education face a series of risk problems. In the field of film and television creation, AI will not replace human labor, but the application of AI can improve the creation efficiency, develop the creation of film and television artworks and media models through the combination of man and machine, and jointly realize the inevitable development of the industry.

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