

The use of artificial intelligence in games : based on the perspective of service players and ethical principles

Yifan Zhu*

Shanghai Starriver Bilingual School, Shanghai, China

*Email: Drmiaowei@163.com

Abstract. With the development of the application of artificial intelligence, the development of "human-computer interaction" game has become a representative of the digital revolution in the era of intelligence. Players have divided a virtual world on the basis of the real world, so that game players can break through the limitations of the material form world in the experience. This study is based on intelligent game service players and social moral perspective to face the development of intelligent game, using the combination of qualitative analysis and quantitative analysis, from the players to participate in the game ontology, epistemology, social moral value three perspectives to explore the present situation of artificial intelligence "man-machine relationship" in the game, in order to seek game players to promote "intelligent game" reality, the development path of harmonious coexistence. The world of intelligent games reflects the new content, new development and new changes of contemporary human digital activities. We must think and analyze the nature, laws and functions of intelligent gamification, and provide suggestions and countermeasures for exploring and solving the social problems of virtual world development in artificial intelligence games.

Keywords: Ai; artificial intelligence; game players; social morality.

1. Introduction

With the increasing use of AI in gaming, ethical challenges are increasingly emerging. How to follow ethics while ensuring player experience and innovative game design is becoming the focus of game developers. In a game, players need to provide certain personal information and behavioral data to the game company. In the process of analyzing these data, the AI system needs to ensure that players' privacy is not violated and the data security is guaranteed. Game developers should follow relevant laws and regulations, such as China's Cyber Security Law, strengthen data management and protection, and prevent data leakage, abuse and other phenomena.

2. Strengthen fair competition and avoid abuse

The use of artificial intelligence in games may lead to an unfair competition phenomenon. For example, some players use technical means to crack the game anti-cheating system, or use artificial intelligence algorithms to maliciously brush lists and occupy resources. Game developers need to take steps to ensure the fairness and transparency of AI systems and avoid abuse. From the intelligent interaction of game characters to the automatic optimization of the game engine, and then to the in-depth analysis of game data, they are constantly improving the game experience and enriching the game content. However, at the same time, AI may also lead to a series of unfair competition in games, which will have a negative impact on the fairness and health of the game.

2.1 Strengthen fair competition

Some players through the technical means to crack the game anti-cheating system, causing a serious threat to the fairness of the game. These players use artificial intelligence technologies, such as machine learning and deep learning, to analyze and study vulnerabilities in the game's anti-cheating system to achieve cheating. This behavior not only destroys the fairness of the game, but may also cause other players to lose interest in the game and affect the sustainability of the game.

2.2 Avoid information abuse

The use of artificial intelligence algorithms to maliciously brush lists, occupy resources and other behaviors are also increasingly rampant. Some players through artificial intelligence technology, batch control of the game characters to brush the list, quickly accumulate game resources, so as to occupy the top of the list. This behavior not only makes it difficult for other players to compete, but it may also lead to an imbalance in the economic system in the game and affect the long-term operation of the game. In response to these unfair competition phenomena, game developers need to take a series of measures to ensure the fairness and transparency of AI systems and avoid abuse. Here are some suggestions for this question:

(1) Strengthen the game anti-cheating system: game developers should constantly upgrade and improve the game anti-cheating system, improve the security and stability of the system, and prevent artificial intelligence technology attacks. At the same time, players who detect cheating should be severely punished to maintain the fairness of the game.

(2) Introduce the real-name system and credit system: the identity of players is verified through the real-name system, and the credit system is combined to restrain the abuse of artificial intelligence in the game. For malicious brush list, encroachment on resources and other behaviors, can take to reduce the ranking, limit resource access and other means, so that players pay the corresponding price in the game.

(3) Limiting the application scope of artificial intelligence algorithm: strictly check the application of artificial intelligence technology in games, and limit its application in the core competition fields of games, such as combat, resource competition, etc. By setting the rules of the game, we can ensure that AI technology is only used as an aid, rather than a decisive factor.

(4) Improve the transparency of the game: Game developers should disclose the rules of the game and the working principle of the AI system to players, so that players can understand the operation mechanism within the game, so as to reduce the occurrence of unfair competition.

(5) Strengthen supervision and law enforcement: For the abuse of AI technology to undermine game fairness, game developers should actively cooperate with relevant departments to supervise and attack, so as to maintain the sound development of the game industry. Game developers need to pay close attention to the abuse of AI technology in games, and take effective measures to ensure the fairness and health of the game. Only in a level playing field environment can the game industry achieve sustainable development and bring better game experience to the vast number of players.

3. Follow the moral principles and create a positive game culture

As an important carrier of cultural communication, games need to follow the moral code and actively guide players. Developers should pay attention to whether the AI characters and their actions in the game meet the ethics and avoid spreading bad information. In addition, games should respect different cultural backgrounds and values, and provide players with a variety of game experiences. As one of the most popular cultural communication carriers today, games shoulder the important responsibility of guiding the public values and morals. In the process of game development, it is the social responsibility of game developers to follow the moral code and actively guide players, so that they can enjoy the fun of the game while receiving the correct social values.

First, game developers need to pay attention to whether the AI characters and their actions are ethical. AI characters often carry the development of stories and affect the emotional experience of players. Therefore, ensuring that the behavior of these characters are ethical and avoiding the dissemination of bad information is crucial to maintaining the positive communication effects of the game. In addition, ethics in games are not limited to AI characters, but also include game scenes, mission design and other aspects. Developers need to strictly check these areas to ensure the ethics of the game.

Secondly, games, as a cultural product, should respect different cultural backgrounds and values. In the context of globalization, game players come from different countries and regions, and have

different cultural backgrounds and values. Game developers need to take this into account and meet the needs of different players with a variety of game content. This respect is not only reflected in the diversity of the game content, but also in providing a fair and friendly game environment for players from different cultural backgrounds. Game developers will also need to focus on in-game social interactions. Social interactions in games can often reflect interpersonal relationships in the real society, and have an impact on players' mental health and social abilities. Developers should actively guide players to build healthy social relationships in the game, and encourage them to solve problems through cooperation and mutual assistance, so as to develop their team spirit and communication skills.

Finally, the game communication should emphasize a healthy and upward lifestyle. The character image, story line and other elements can have a profound impact on the player. Game developers should use games as a vehicle to spread healthy lifestyles and promote positive values. Through the shaping of the game characters and story arrangement, guide players to pay attention to real life health issues, such as physical exercise, mental health, etc.

In short, games, as an important carrier of cultural communication, should not only pay attention to the AI characters and their behaviors, respect for different cultural backgrounds and values, but also pay attention to the social interaction and healthy lifestyle in the game in the process of following the moral principles and actively guiding players. Through these measures, the game can spread the culture and play its due role in education and guidance, and provide players with diversified game experience. On this basis, China's game industry can continue to grow and make greater contribution to the global cultural communication.

4. Humans and artificial intelligence grow together

Game developers should focus on the development of artificial intelligence technology and its impact on the game industry. While innovating game design, we should attach importance to the common growth of human beings and artificial intelligence, give full play to the auxiliary role of artificial intelligence, and improve the game experience, rather than completely replace human beings. Game developers should actively pay attention to the trends of artificial intelligence (AI) technology and its profound impact on the game industry. While constantly innovating game design, we need to attach great importance to the common progress of human beings and artificial intelligence, and give full play to the auxiliary role of AI to improve the game experience, rather than completely replacing the position of human beings in the game.

First, we need to recognize that the development of AI technology has had a significant impact on the game industry. AI is changing every aspect of game development, from the intelligent interaction of the game characters, to the automatic generation of game development. Game developers need to keep up with this technological trend and master the application of AI in game production to satisfy players' constant pursuit of innovative gaming experience.

Second, the common growth of human beings and artificial intelligence is crucial. In the process of game development, we can use AI technology to optimize game design and improve development efficiency. At the same time, we can also apply AI to game operation to realize the deep mining and precision marketing of player data. However, we cannot ignore the unique advantages of humans in game creativity, emotional communication and so on. Game developers need to constantly give full play to people's subjective initiative in the cooperation with AI, realize the complementary advantages of people and AI, and jointly enhance the value of games.

In addition, we need to give full play to the auxiliary role of AI in the game experience. With AI technology, we can make their thinking and behavior more challenging and fun; we can use AI algorithms to provide personalized game recommendations and guidance to make them more rich and enjoyable. However, we must note that AI can only be used as an auxiliary means, rather than replacing the core position of human beings in the game. The core value of a game remains in the game world, story line, and emotional communication that humans create.

In short, game developers should focus on the development of AI technology and its impact on the game industry. While innovating game design, we should pay attention to the common growth of human beings and artificial intelligence, give full play to the auxiliary role of AI, and improve the game experience. Through the close collaboration between people and AI, we expect to create more innovative, fun and immersive games that provide an unprecedented gaming experience. At the same time, we need to keep in mind the core position of humans in game creation, and ensure that the application of AI technology in the game industry can help humans create a better game world.

5. Conclusion

In short, the application of AI in the game field has gradually changed the pattern of the game industry, bringing richer game experience to players. However, along with the ethical challenges, game developers need to pay attention to the needs of players, follow the code of ethics, and ensure the proper use of AI in games. In the future, with the continuous development of artificial intelligence technology, it is believed that the combination of games and artificial intelligence will present more innovative results and bring a better game world for players. While analyzing the opportunities and challenges brought by artificial intelligence to games, the paper puts forward the coping strategies such as following the moral principles and protecting the rights and interests of players. Hope to provide some reference for game

References

- [1] Chang Li. The use of artificial intelligence in digital media technology. *Information System Engineering*, 2022, (07), 8-11.
- [2] Li Lin. Machine learning in electronic games, master's dissertation, Nanjing University of Information Science and Technology). <https://link.cnki.net/doi/10.27248/d.cnki.gnjqc.2021.000325> doi:10.27248/d.cnki.gnjqc.2021.000325.
- [3] Zhou Fei & Li Jiuyan. The current situation and prospect of AI application in game development. *China Management Informatization*, 2020, (23), 183-185.
- [4] Wang Feiyue . AI wins in multi-role games. *The Chinese Science Foundation of China* (02), 205-206. doi:10.16262/j.cnki.1000-8217.2020.02.020.
- [5] Cao Kunze. Artificial intelligence and its applications in the gaming space. *Technology communication*, 2020, (08), 143-144
- [6] Qin Xue & Matthew Hertson.. Artificial intelligence: Understanding common sense in video games. *World Science*, 2018, (10), 31-32.
- [7] Peng Yuqiang, Exploring the application of artificial intelligence technology in online games. *Communication World*, 2018, (07), 291-292.
- [8] Dai Jiabin. Analysis of the application of artificial intelligence technology in games. *Tomorrow fashion*, 2018, (04), 297.
- [9] Yang Bo. (2018). Try to analyze the artificial intelligence technology in computer games. *Computer fan*. 2018, (01), 162-163.
- [10] Zhang Dongmei. Master's thesis on Game Design and Development of Earthquake safety Education for Children based on Artificial Intelligence, Yunnan Normal University. 2017.