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In this second episode, we will focus on two significant uses of artificial intelligence (AI) in video games: driving non-player characters (NPCs) and adapting game worlds. We will examine the legal issues associated with these uses, including copyright infringement, ownership of Algenerated content, image rights, and patentability of AI inventions. We will also briefly touch upon the upcoming EU Artificial Intelligence Act.

VIDEO GAMES SERIES

LEGAL IMPLICATIONS
SURROUNDING AI USE

DRIVING NON-PLAYER CHARACTERS (NPCs)

The use of AI to drive NPCs brings realism and complexity to video game environments. AI allows NPCs to exhibit lifelike behaviours, decision-making capabilities, and adaptive responses, enhancing player interactions and the overall game environment. From driving vehicles to engaging in combat or providing quest interactions, AI-powered NPCs contribute to the depth and realism of video games, creating captivating and challenging gameplay experiences for players.

However, the use of AI to drive NPCs also poses legal challenges. One such challenge is the risk of image rights infringement. Image rights encompass the right to control and exploit one's own image, granting individuals the exclusive right to authorise the use of their likeness. When NPCs in video games replicate the appearance of real individuals, for instance celebrities or public figures, there is a potential risk of infringing upon these image rights. Game developers must navigate the complexities of obtaining appropriate licenses or ensuring the NPCs' appearances do not violate image rights to avoid potential legal claims.

The patentability of Al inventions used in NPCs is another legal consideration. Innovative Al algorithms and technologies used in video games may be eligible for patent protection but only when they produce a technical effect that goes beyond the "normal" physical interactions between the program (software) and the computer (hardware) on which it is run. Mathematical methods, schemes, rules and methods for playing games, and programs for computers are not patentable as such. However, if they are applied to address a technical problem within a specific field of technology, patent protection may be pursued. An example is the patent for the 'Nemesis System' owned by Warner Bros, which enables NPCs to remember past encounters with players and to adapt their behaviour, appearance and abilities based on these encounters.

ADAPTING GAME WORLDS FOR ENGAGING EXPERIENCES

Al's ability to adapt game worlds to create more immersive and challenging environments enhances the player experience. Through procedural content generation (PCG), Al algorithms analyse player behaviour, preferences, and



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performance data to dynamically adjust the game environment, making it more challenging, diverse, and tailored to each individual player. PCG enables the generation of vast and unique game worlds, filled with procedurally generated landscapes, quests, and other content. This allows for endless exploration and discovery, as no two playthroughs are the same.

However, this content generation can also raise legal concerns. For instance, developers must be mindful of copyright infringement when generating Alcreated content, such as artworks, music, characters or level design. A first possible issue is the use of copyrighted works as input to train Al models, without the authorisation of the copyright owner. A second conceivable problem is the possible copyright infringement by the output generated by Al models. The assessment of a supposed infringement is likely to be fact dependent, but developers must avoid that Al-generated content replicates copyrighted works without proper authorisation or licensing.

Another legal concern is the ownership of Al-generated content. Generally speaking, copyright law attributes ownership to the human creator who exercises creative control and makes autonomous decisions in the content creation process. However, when it comes to Al-generated content, the question of authorship and ownership becomes more intricate. EU copyright laws currently do not explicitly address the authorship or ownership of content created solely by Al systems. At present only human beings can legally qualify as "author". It can therefore be argued that since AI is a tool used by human creators, the human input and involvement in the Al training or programming process should determine ownership. On the other hand, tracing a sufficiently direct human involvement in these complex computational processes can be challenging. For this reason, some authors propose that AI systems themselves should be considered as "authors" with certain rights. In addition to the question of who can qualify as author, the output must also fulfill the originality requirement imposed by copyright law in order to enjoy protection.

Given these copyright related issues, integrating generative Al outputs directly into a video game should be approached with caution. When it is uncertain who owns the IP rights in such content, and whether third party IP rights might be infringed, licensing that content to third parties such as publishers and end users will entail certain risks.

EU ARTIFICIAL INTELLIGENCE ACT

The EU legislator has recently reached an agreement on a regulation laying down harmonised rules for the development, marketing and use of artificial intelligence (Artificial Intelligence Act or "Al Act"). The Al Act contains key definitions and introduces a risk-based approach that classifies high-risk Al systems, prohibits certain Al systems (such as biometric identification systems), and exempts AI systems that present no significant risk. The AI Act also contains a separate section dedicated to General-Purpose Al Models, like ChatGPT. Al systems will be subject to certain requirements focusing on inter alia transparency, accountability and human-centricity. For instance, users will have to be informed that they are interacting with an AI system and content used to train Al-systems must be disclosed. When enacted, the EU Al Act will influence the regulatory landscape for AI implementation in video games, ensuring that ethical and safety considerations are taken into account while fostering innovation in the gaming industry.



CONCLUSION

As Al technology continues to advance, its integration into video games brings tremendous possibilities, but also multiple legal complexities. Al-powered NPCs and adapting game worlds offer immersive and engaging experiences but require careful consideration of legal issues such as copyright infringement, Al-generated content ownership, image rights, and patentability. Collaboration between game developers, legal experts, and policymakers is vital to establish clear legal frameworks that foster innovation while protecting the rights of all parties involved.

For any questions or assistance, don't hesitate to email our Video Games Team at gaming@simontbraun.eu.

This article is not a legal advice or opinion. You should seek advice from a legal counsel of your choice before acting upon any of the information in this article.

