Artificial Intelligence Applications

Name: N. A.

DEFINTION OF ARTIFICIAL INTELLIGENCE AND THE DIFFERENT FIELDS THAT IT CAN BE APPLIED:

The definition of AI is the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making and translation between languages. As far as the different fields that it can be applied there are plenty of them since the technology has been evolved in extremely high levels, an example of one field is in healthcare. AI allows diagnosis and treatment of health issues at earlier stages due to the parent's medical history analysis. The implementation of this type of AI industry of healthcare allows timely prevention, decreases therapy costs, and timely delivery of individual recovery plans. Also in the field of healthcare it helped via digital healthcare tools. AI in healthcare apps helps with diagnosis chat bots and data monitoring to alert potentially dangerous health conditions. Another field of AI application is in travel and hospitality. More specifically AI-based apps include AI for travel disruption management that suggest alternative solutions in case of bad weather or other delays. Analyzing visitor's sentiments, the system may improve guest experience, timely reveal problems and send notifications about the necessity of human intervention.

AI IN GAMING:

First of all what is AI in gaming?

AI in gaming refers to responsive and adaptive video game experiences. These AI-powered interactive experiences are usually generated via non-player characters, or NPCs, that act intelligently or creatively, as if controlled by a human game-player.AI is the engine that determines an NPCs behavior in the game world.

While AI in some form has long appeared in video games, it is considered a booming new frontier in how games are both developed and played. AI games increasingly shift the control of the game experience toward the player, whose behavior helps produce the game experience.

AI procedural generation, also known as procedural storytelling, in game design refers to game data being produced algorithmically rather than every element being built specifically by a developer

Why does AI in gaming matter?

AI in gaming is all about enhancing a player's experience. It is especially important as developers deliver gaming experiences to different devices. No longer is gaming simply a choice between console or desktop computer. Rather, players expect immersive game experiences on a vast array of mobile and wearable devices, from smartphones to VR headsets and more. AI enables developers to deliver console-like experiences across device types.

AI-based video game can have various effects on players, both positive and negative, depending on how they are designed and the player's individual experiences and interactions with the game. Here are some of the effects:

Negative Effects:

*1.*ADDICTION: Games that use AI to optimize engagement and retention can be highly addictive. Players may find it difficult to stop playing, which can lead to negative impacts to their lives.

*2.*FRUSTRATION: While AI can provide challenging opponents, it can lead to frustration if the AI is perceived as unfair or overly difficult. This frustration can deter some players from enjoying the game

*3.*SOCIAL ISOLATION: Spending excessive time playing AI-based video games can lead to social isolation as players may withdraw from real-life social interactions.

Positive Effects:

*1.*ENHANCED GAMEPLAY EXPERIENCE: AI can create more dynamic and responsive gameplay experiences. NPCs (non-playable characters) with advanced AI can offer more realistic and challenging opponents or allies, making the game more engaging and enjoyable.

*2.*PERSONALIZED CHALLENGES: AI can adapt to the player's skill level, providing tailored challenges. This can help players stay engaged and motivated as the game adjusts to their abilities.

*3.*REALISTIC ENVIRONMENTS: AI can be used to create more immersive and realistic game worlds. For example, AI-driven weather systems, wildlife behavior and day-night cycles can make virtual worlds feel more alive.

 PERSONAL VIEW ABOUT THE USE OF AI IN THE GAMING FIELD:

AI – term that sparks visions of the future, has become a pivotal aspect of modern technology. It's an intricate blend of computer science, data analytics and machine learning, aimed at creating machines capable of performing tasks that typically require human intelligence.

Gaming industry, a juggernaut in the entertainment sector, has witnessed a phenomenal evolution. From the pixelated adventures of the 80's to today's hyper-realistic virtual worlds, gaming has transcended boundaries, capturing the imaginations of millions worldwide. It's not just an entertainment from but a cultural phenomenon, uniting people across continents and demographics.

AI algorithms are used to develop complex game characters and scenarios. These AI-driven characters can learn from the player's behavior, making each gaming session unique. This adaptability enhances the gaming experience, making it more engaging and realistic.

SOURCES:

https://www.searchmyexpert.com/resources/game-development/ai-impact-game-development

https://www.linkedin.com/pulse/artificial-intelligence-video-games-pros-cons-noor-abbas-mirza

https://www.arm.com/glossary/ai-in-gaming