**AI x Gaming**

**Week of December 30th, 2024**

# **Top 3-5 Key News Items**

**Key News Item #1:** Nintendo might Switch 2 AI upscaling ([Link](https://www.techradar.com/gaming/will-the-nintendo-switch-2-feature-ai-upscaling-this-patent-suggests-its-on-the-cards))

* A Nintendo patent filed in July 2023 was recently made public that fueled rampant Switch 2 speculation around machine learning based upscaling.
* The patent describes a technology for “converting images of one resolution into another (e.g. higher) resolution and may be used in real-time applications from images generated by, for example, a video game engine” and gives examples of converting a 540p image to 1080p or 1080p to 4K.
* The unannounced Switch 2 isn’t mentioned and there’s no guarantee that the technology will be used, but it has been leaked that the pending console will be backwards compatible with the original Switch, giving more reason for AI upscaling to potentially see use.
* An interesting suggestion in the patent is using AI upscaling as a form of compression by using lower resolution textures on storage mediums and upscaling to the target resolution. It’s debatable how consistent the quality of the resulting visuals would be, but it’s not a surprising idea given the constantly increasing resolution demands in gaming.
* Nintendo has consistently fought against any 3rd party emulation of its games, but has profited from leveraging the technology itself through the Wii/Wii U virtual console and Switch Online classic games. There’s a definite chance if Nintendo uses the tech on retro games it could see backlash as many retro enthusiasts generally want the nostalgia untampered.
* **Why does this matter to AI x Gaming:** Machine learning has potential in many areas of game technology to help remove or reduce bottlenecks, especially those rising from escalating expectations of realism. Nintendo generally eschews realism for artistic style, but still cares about graphical fidelity and needs compelling features in the Switch 2 to avoid another Wii U situation.

**Key News Item #2:** CES pre-swarmed with AI monitors and laptops ([Link](https://www.pcworld.com/article/2566824/what-to-expect-monitors-ces-2025.html))

* Rather than waiting for CES to start proper, many device manufacturers already started showing off AI enhanced displays and computers, albeit with many questionable features.
* MSI had the most reveals with a desktop PC that includes an [AI HMI touch panel display](https://www.club386.com/msi-touchscreen-gaming-pc-shows-how-to-do-ai-in-style/), monitors with its new [AI Navigator menu](https://sme.asia/msi-ai-navigator-elevating-gaming-with-smart-optimisation/) and optimization system and new [Claw AI+ series handheld gaming PCs](https://www.msn.com/en-us/lifestyle/shopping/msi-reveals-two-new-ai-powered-handheld-gaming-pcs-starting-at-799/ar-AA1vhAq0?apiversion=v2&noservercache=1&domshim=1&renderwebcomponents=1&wcseo=1&batchservertelemetry=1&noservertelemetry=1) with integrated NPUs (Neural Processing Units) designed to be more power efficient than GPUs at some tasks.
* Samsung showed off a [series of monitors](https://news.samsung.com/global/samsungs-new-2025-monitors-bring-ai-capabilities-gaming-performance-and-enhanced-productivity-to-ces) with AI chips for display optimization that includes game genre analysis and tweaks, 4K AI upscaling, and even a 2D to 3D automatic conversion for a glasses free 3D display.
* LG revealed [laptops that use “hybrid AI”](https://hothardware.com/news/lg-gram-laptops-local-ai-arrow-lake-vrr-gaming) meaning an automatic selection between on-device and cloud based AI computing for tasks that can include a GPT-4o based subscription service.
* It’s clear that manufacturers were looking for any place they could tag AI onto this year's device refreshes, with gamers being a demographic target. A lot of the proposed features sound theoretical or half-baked, but at least there’s a variety of attempts from optimizing displays to improving UI to enhancing power efficiency.
* Early reviews of the updated MSI Claw AI+ series do at least look positive for hopefully coming a little closer to competing meaningfully with the Steam Deck thanks to better performance and ergonomics, but the UI also seems to be a bit of a mess compared to Valve’s well polished device.
* **Why does this matter to AI x Gaming:** Computing device manufacturers know gamers are a solid target for overpriced gimmicks like RGB lightning and this is likely just the beginning of slapping AI on anything possible. Much like higher refresh rates can benefit some games, there is potential for at least some of the optimization features for displays and NPUs to still be useful.

**Key News Item 3:** Zero Escape creator talks staying ahead of AI ([Link](https://automaton-media.com/en/news/how-can-game-developers-stay-ahead-of-ai-generated-games-zero-escape-creator-kotaro-uchikoshi-shares-views/))

* Too Kyoo Games’ Kotaro Uchikoshi, known for writing and directing the Zero Escape (500K sold worldwide) and AI: The Somnium Files series, held a lecture at the WePlay Expo 2024 in China and talked about the influence of GenAI on game development in the future.
* He conceded that AI assisted game development will bring about a new era of capability, especially for solo amateurs without prior game dev knowledge and indies, but emphasized the ways that humans still have some advantages.
* The thrust of his point was on creativity and originality with the context that AI, at least currently, basically does what it’s told without the important human touches and deviations from the expected, including the influence of life experiences.
* Uchikoshi is correct in AI generally still relying on the prompter to actually input the creativity necessary to make something worth playing rather than strictly derivative. Initial attempts to use AI for game creation so far are generally just looking to replicate human achievements rather than break new ground.
* Given that AI is still capable of using elements of randomness (like “temperature”) and high variance from inputs and prompts combined with far more “influences” than a single human can ever have, there’s room for an AI architected and prompted to take all of these advantages into account.
* **Why does this matter to AI x Gaming:** It will take time for GenAI to develop game designs and narrative that are truly creative, but it seems inevitable to catch up there sooner than later as well given that many successful games are themselves not all that original. AI may also have an advantage in being able to understand what players want at a more subtle pattern recognition level than humans and let that steer creativity towards at least commercial success.

**Key News Item 4:** Web3 gaming embracing AI gimmicks ([Link](https://www.panewslab.com/en/articledetails/7wl272ep.html))

* With web3 games often focusing on hype and FOMO far more than quality games it’s no surprise that they continue attaching AI in various forms to draw interest and increase token values, with 3 popping up this week in various stages.
* The one closest to landing is [Artyfact](https://playtoearn.com/news/ai-game-artyfact-heads-to-epic-games-store-on-january-24th), the titular game of the “Artyfact ecosystem”, which is releasing on the Epic Games Store on January 24th. This is a 3rd person multiplayer shooter trying to use AI in multiple ways including NPCs, content generation, cheat detection, data analysis and modeling player enjoyment for real-time changes. Unfortunately most of those features are far from solved even with AI, making it likely that many will barely work if at all. The $ARTYFACT token jumped in price from $0.75 to $1.15 on the news, helping recover some recent drops.
* The next entry is [Sipher AGI](https://playtoearn.com/news/ather-labs-unveils-sipher-agia-bold-vision-for-ai-driven-gaming-worlds), building on Ather Labs' already released mobile action roguelike, Sipher Odyssey. Sipher AGI is being pitched as a "collaborative ecosystem" for players and creators to build AI agents that learn and grow through virtual world interactions. While bold, the idea of multi-game and multi-world spanning AI agents learning and growing alongside players is premature for developers at this scale.The $SIPHER token is up from $0.16 to $0.22 on the news.
* Lastly, [The Farm](https://www.panewslab.com/en/articledetails/7wl272ep.html) is taking a less action oriented approach with raising and training of creatures, going for the Pokemon demographic that has been a popular web3 target. The game uses retro graphics, making it a little more doable but the ambitions of teaching creatures skills like tarot reading and drawing along with giving them their own blockchain wallets is likely to be problematic to say the least. The $FARM token is less than a month old, but nearly doubled from $42 to $80 on the news.
* The problem with all three of these, and much of web3 games in general, is simply overpromising vastly ambitious goals that leverage a belief in AI solving the problems to get there. Games that use Kickstarter to crowd fund already have a problem with promising too much, but it’s far worse when tied to a blockchain token that not only has to sell well initially, but also has to keep going up on more promises.
* Unfortunately web3 games are already swamped with many issues that you’d expect from a field with still somewhat immature technology, lack of experienced talent, and no clear successful business model or economics. Throwing another technology into the mix that the developers can’t even influence or fully understand due to the opaque nature of OpenAI and others, will simply magnify the miscalculations being made by developers and players alike.
* **Why does this matter to AI x Gaming:** While AI does have some potential to work alongside blockchain technology, especially as agents develop, there will continue to be a litany of web3 game devs hoping to piggyback on the hope that AI unlocks success. Both blockchain and AI technology aren’t genres or platforms, but simply technology that has to be smartly integrated with actual quality games, something that is already a hard target to hit.

# **Other News Items**

* **AI-powered avatars can gesture naturally as they speak** ([Link](https://www.newscientist.com/article/2462259-ai-powered-avatars-can-gesture-naturally-as-they-speak/)): Discusses an AI model that allows AI-powered avatars to gesture when speaking for more natural video game animations.
* **Meta’s AI-generated bot profiles are not being received well** ([Link](https://www.theverge.com/2025/1/3/24334946/meta-ai-profiles-instagram-facebook-bots)): Meta made a big deal of introducing AI generated bots to Facebook only to quickly backpedal, but this will be an interesting first dip into trying to integrate AI “people” in social places.

# **Content Worth Consuming**

1. **Computing inside an AI** ([Link](https://willwhitney.com/computing-inside-ai.html)): An interesting exploration of what it would mean to compute “inside” an AI instead of talking to it.
2. **I hosted a games night with the help from AI and here’s how you can too** ([Link](https://www.msn.com/en-gb/money/technology/i-hosted-a-games-night-with-the-help-from-ai-and-here-s-how-you-can-too/ar-AA1wM38t)): Great practical use case of AI to generate content for party/social games rather than just video or board games.
3. **Watch the Nvidia CES 2025 Keynote** ([Link](https://www.youtube.com/watch?v=k82RwXqZHY8)): Catch the CES keynote that will no doubt mention applications of AI in consumer tech given Nvidia’s current focus.
4. **Games industry predictions for 2025: Generative AI, games as ecosystems, and thrive in '25** ([Link](https://www.pocketgamer.biz/games-industry-predictions-for-2025/)): Good 3 part piece on 2025 predictions that includes AI in games.