**AI x Gaming**

**Week of December 23rd, 2024**

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

**Key News Item #1:** Xterio reveals its first AI game ([Link](https://playtoearn.com/news/xterio-reveals-its-first-ai-game-palio))

* [Xterio](https://www.xter.io/) is a web3 gaming ecosystem that joined the wave of embracing AI and finally revealed its first AI related game, Palio, a PC/Mobile browser based shopkeeper simulator with crafting elements.
* The gameplay is focused on crafting items to sell to NPCs, with a special Piggy King NPC that can be negotiated with using Xterio’s “AI Conversational Engine” to pay up to 10x prices.
* Integrating AI into NPC game conversations has been proposed many times, but not integrated in any games with significant scale. Difficult to estimate traction for Palio as Xterio only has one game out so far, Age of Dino, which is a 4X March-Battle game that has only gotten around [100K downloads](https://play.google.com/store/apps/details?id=com.clashofdinos.game&hl=en_US).
* Focusing the conversational AI on a single roaming NPC and giving an actual game benefit to conversation is a smart strategy to manage and iterate on the boundary pushing but risky use of AI.
* **Why does this matter to AI x Gaming:** Adding conversational AI into a game that doesn’t completely rely on it, but does benefit from it, is an important baby step towards broader usage. Xterio is an unproven ecosystem, but has managed to raise $80M+ and supposedly has upwards of 10M users.

**Key News Item #2:** Meta Motivo AI model has legs ([Link](https://techfundingnews.com/agave-games-ai-driven-mobile-gaming-puzzle-funding/))

* Meta launched a new model called [Meta Motivo](https://ai.meta.com/blog/meta-fair-updates-agents-robustness-safety-architecture/) specifically designed to create more realistic movements for virtual avatars and pave the way towards a more realistic metaverse.
* The Motivo model was trained off the [AMASS](https://amass.is.tue.mpg.de/) unlabeled optical marker-based motion capture dataset of human movement using reinforcement learning.
* Meta says its key novelty is embedding states, motions and rewards into the same latent space to solve a wide range of whole-body control tasks including motion tracking, goal pose reaching and reward optimization, without additional training or planning.
* Meta has been improving the realism of its [Quest VR based avatars](https://www.meta.com/avatars/) and while this will only make a minor difference for player driven avatars, it could increase the immersion with more realistic feeling NPC avatars.
* Meta is continuing its openness by releasing the [paper](https://ai.meta.com/research/publications/zero-shot-whole-body-humanoid-control-via-behavioral-foundation-models/), [code, model](https://github.com/facebookresearch/metamotivo) and an interactive web based [demo](https://metamotivo.metademolab.com/demo) to try it out.
* **Why does this matter to AI x Gaming:** AI based models for animation not only help reduce the uncanny valley appearance many character animations have in games, but will also increase the potential for truly dynamic animation responses from NPCs and huge reductions in animation development time for game devs.

**Key News Item 3:** Nvidia sees future AI agents in Simulated Worlds ([Link](https://x.com/DrJimFan/status/1871620755798233156))

* Senior Nvidia researcher [Jim Fan](https://x.com/DrJimFan) proposes that embodied AI agents will start life in virtual environments before being deployed in real space and potentially hive-mind-like linked together. He provides a City of Tokyo 3D high-res digital twin simulation available for download to reinforce the point.
* This proposition is also supported by the recent release of the [Genesis](https://genesis-embodied-ai.github.io/) “Generative and Universal Physics Engine for Robotics and Beyond” platform to support virtual training for AI robots.
* Current AI is mostly driven by knowledge through text and images rather than any form of experience, but being able to exist in virtual spaces using solid physics systems can start giving AI more of an experiential sense of knowledge.
* This can blur the line between embodied AI agents, realistic metaverses and augmented reality to allow for games to act as a training ground for human interaction that can bleed out into real world robots driven by AI that has tons of virtual world experience.
* **Why does this matter to AI x Gaming:** Gaming can push humans to spend more and more time in virtual digital twins of the real world or metaverses where AI can learn about human and physical interaction from far more than text prompts. Humans can also benefit from the ability to role play and simulate experiences with AI so the learning goes both ways.

# **Other News Items**

* **DeepSeek Outsmarts the Giants** ([Link](https://x.com/deepseek_ai/status/1872242657348710721?utm_source=www.thesignal.so&utm_medium=newsletter&utm_campaign=china-s-ai-breakthrough-musk-s-billions-and-metal-head-on-wheels)): Chinese AI firm DeepSeek released its V3 model that blows much of the competition out of the water in efficiency.
* **Musk Pulls in $6B for xAI** ([Link](https://x.ai/blog/series-c)): Elon Musk raised a $6B Series C investment to rapidly scale up its Grok AI, recently released Aurora image generator and more. This may also fund the development of a game studio Elon hinted at previously.
* **UK is considering drastically changing copyright law in favor of AI companies** ([Link](https://www.thetimes.com/article/8c8847c9-3b52-49ff-91c3-267a4d688d88)): The UK government is planning on launching a consultation around proposals to make copyright protected training data into an opt-out system to benefit the growth of AI models.

# **Content Worth Consuming**

1. **Survival Games And The AI, VR Revolution: Fears, Hopes And Challenges** ([Link](https://www.forbes.com/sites/anishasircar/2024/12/27/survival-games-and-the-ai-vr-revolution-fears-hopes-and-challenges/)): An exploration of the overlap between AI, VR and the Survival game genre.
2. **Using Artificial Intelligence in Fantasy Sports App Development to Personalize Gaming Experiences** ([Link](https://www.sciflare.com/blog/ai-impact-in-fantasy-sports-app-development/)): An analysis of AI powered game personalization through the lens of fantasy sports gaming.
3. **Decentralized Intelligence in GameFi: Embodied AI Agents and the Convergence of DeFi and Virtual Ecosystems** ([Link](https://arxiv.org/abs/2412.18601)): A paper exploring how embodied AI agents interact in a GameFi/DeFi virtual ecosystem which is no doubt going to be a huge part of web3 AI in 2025.
4. **An interview with Alexandra Kurdyumova and Alina Davletshina from Futura Digital on legal aspects of AI in game development** ([Link](https://wnhub.io/news/engines/item-46653)): A good discussion on a growing topic as AI will manifest as part of game development whether it's wanted or not, purely due to economic forces.
5. **Exploring the Evolution of AI in Video Game Design: A Journey Through History** ([Link](https://www.developers.dev/tech-talk/video-game-design-the-history-of-ai.html)): A good look at AI in game design through a bigger scope of time than just 2024.
6. **How AI Summarization Enhances Your Gaming** ([Link](https://www.zleague.gg/theportal/ai-summarization-gaming/)): A number of practical use cases for using the power of AI LLM information processing and summarizing to enhance gaming experiences.
7. **Thoughts on the eve of AGI** ([Link](https://threadreaderapp.com/thread/1871946968148439260.html)): Lots to chew on from Will Bryk, CEO of Exa AI Labs as the conversation around AGI has ramped up lately.
8. **The Future of AI Agents in Gaming: A Vision from the Trenches** ([Link](https://x.com/MuazXinthi/status/1872977806893711419)): Some thoughts on how AI Agents fit into gaming as AI agents themselves increase throughout the shown 5 level framework.