**AI x Gaming**

**Week of November 23rd, 2024**

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

**Key News Item #1:** Elon wants to Make Games Great Again ([Link](https://x.com/elonmusk/status/1861801046949191686))

* Elon Musk posted plans on X to establish an AI-driven game studio under xAI, aiming to challenge the dominance of large corporations in the gaming industry.
* This was in response to user BillyM2k complaining how “game developers and game journalism got so ideologically captured”.
* Elon has a tendency to throw out lots of random ideas, but also attempts to execute on many of them and is doing well in at least a few. It’s likely this happens at least in an experimental way.
* While he might not necessarily be recognized as a gamer, he recently bragged about being a [global top 20 Diablo 4 player](https://www.forbes.com/sites/paultassi/2024/11/06/elon-musk-says-hes-a-global-top-20-diablo-4-player-and-its-actually-true/) and [became #1](https://www.forbes.com/sites/paultassi/2024/11/22/elon-musk-apparently-just-became-the-no-1-diablo-4-player-in-the-world/) later in the month.
* He also [recently joked](https://www.investors.com/news/elon-musk-weighs-hasbro-acquire-dungeons-dragons-ai-videogames/) about buying Hasbro after bashing decisions the company has been making around the Dungeons and Dragons IP, resulting in a stock price increase for Hasbro.
* **Why does this matter to AI x Gaming:** Someone like Elon, who is known to experiment rapidly and iterate through failure, making an AI driven game company could be massively beneficial for game developers to learn from. However, the chances of him following through is a coin-toss right now.

**Key News Item #2:** Minecraft AI village establishes a tax system and spreads Pastafarianism religion ([Link](https://www.tomshardware.com/tech-industry/artificial-intelligence/ai-created-a-minecraft-ai-village-with-up-to-1-000-inhabitants-project-sid-sees-ai-bots-implement-a-taxation-system-and-spread-pastafarianism-religion))

* Minecraft continues to be a regular playground for AI experimentation, this time from “[Project Sid](https://x.com/GuangyuRobert/status/1831006762184646829)” who ran 1000 agents using a variety of LLMs and configurations.
* The experiment demonstrated a variety of emergent human-like interactions including taxation, likeability, and the spread of a “meme religion”.
* Considering many of the agents combined multiple LLMs together, the feasibility of something like this from a cost perspective is prohibitive at the moment for gaming, but that will eventually change.
* Costs aside, a multiplayer sandbox AI agent driven experience would make for a very novel but unpredictable experience for gamers and there will be plenty more like this.
* This use of LLMs is still early and will eventually evolve into custom trained models with lots of explicit prompting to make it workable for virtual game worlds. But this early demonstration shows lots of potential for human-like behavior.
* **Why does this matter to AI x Gaming:** Single player games and traditional game AI isn’t likely to be impacted, but once cost and behavior gets under control there will be demand for more human-like AI in social virtual worlds that could evolve gameplay in unpredictable but player-welcome ways.

**Key News Item 3:** AI People, an AI-powered Sims experience, navigates a tricky path ([Link](https://www.aiandgames.com/i/150099780/early-impressions-of-the-ai-people-alpha))

* A single player Sims-like AI game, [AI People](https://www.aipeoplegame.com/), has been running an Alpha playtest for early adopters to try out the AI behaviors. Based on Discord engagement it’s likely that the project has less than 30 active players.
* The game in its [current form](https://www.youtube.com/watch?v=3XtqQBt-W0Y) shows one of the difficulties of using LLMs for game AI, a heavy focus on stimuli to drive behavior, especially from the player.
* It also shows the cost problem, with players currently footing the bill for the LLMs being used, although a future update will allow local LLMs. Currently the game uses a $10/mo subscription that includes 1000 credits with the option to purchase more.
* Given the AI characters knowledge of their environment such as object interactions and navigation paths is great for moving beyond just a disguised chatroom, but the current state also shows how often that can have shortcomings.
* LLM driven AI characters make for a very flexible system, but can easily lack the key benefits of The Sims like character personality and strong gameplay.
* **Why does this matter to AI x Gaming:** Game AI is tricky and LLMs aren’t a shortcut to next level interactions. But the more attempts like this, especially in alphas, the faster we can identify and manage the shortcomings. Early reviews note its limitations, but are optimistic about the potential.so there is still time to keep growing things alongside the rapid pace of AI development.

**Key News Item 4:** Making a book into a game ([Link](https://thelongcontext.com/))

* Steven Johnson took a recent 300 page historical crime book he wrote and demonstrated the ease of converting it into an interactive text based mystery crime game using Gemini Pro 1.5 with a 400-word prompt.
* The game is an experiment demonstrating the benefit of large “context windows” in AI, basically super big short-term memory, to hold the 300 page book and the prompt in focus at all times.
* Game and narrative designers can take advantage of large context windows as demonstrated here to explore and expand the narrative in games as well as generate a large variety of dynamic responses.
* Text adventures and future multi-media generated interfaces can make exploring information far more game-like and bring back the Oregon Trails or Where in the World is Carmen Sandiego’s of educational gaming.
* **Why does this matter to AI x Gaming:** Historical information can be difficult to get some gamers excited about, but the potential for AI to comprehend enough information at once to simulate it for a game offers some great possibilities for exploration. What’s exciting is that the game’s base narrative can be set through such a method, and there is a potential to mash this narrative output with other AI-image generators to also add contextual visuals to the game. The composability potential is high.

**Key News Item 5:** Quick course on Building an AI-Powered Game ([Link](https://www.deeplearning.ai/short-courses/building-an-ai-powered-game/))

* This short free course from DeepLearning.ai teaches you how to make text based games using Python.
* Unlike the previous interactive fiction example, the game here is built on RPG systems and narrative managed by the AI.
* The game built here demonstrates useful learnings for anyone interested in integrating LLMs into games including using Python to talk to AI, working with inventory systems, and generating structured fictional content.
* Getting hands on with the guts of games talking to LLMs in a structured way will benefit anyone looking to experiment with early ideas, and even non-programmers can take advantage of AI coding to extend beyond the course.
* Free access to fast learning is crucial to recruiting a huge variety of potential and current developers to push the boundaries of how LLM based AI can work with games.
* **Why does this matter to AI x Gaming:** The ways in which AI and games can work together is still new and with so few experts, courses like this help distribute potential innovation much faster.

# **Other News Items**

* **‘PDF to Brainrot’ study tools are a strange iteration on a TikTok trend** ([Link](https://techcrunch.com/2024/11/20/pdf-to-brainrot-study-tools-are-a-strange-iteration-on-a-tiktok-trend/)): A weird AI driven trend in consuming information that’s become a trend on TikTok and spawned multiple web tools already.
* **OpenAI’s Sora video generator temporarily leaked in protest of early access conditions** ([Link](https://huggingface.co/spaces/PR-Puppets/PR-Puppet-Sora)): To counter OpenAI’s testing policies a group called "Sora PR Puppets" leaked the model onto Hugging Face, shedding light on the real current state of Sora.
* **Runway takes image generation to another level with stylistic control** ([Link](https://runwayml.com/research/introducing-frames)): Building off its success in video generation, Runway adds styles with “Frames”.
* **The New Frontier: AI x Web3 Gaming on BNB Chain** ([Link](https://www.bnbchain.org/en/blog/the-new-frontier-ai-x-web3-gaming-on-bnb-chain)): BNB Chain shows off some future projects for the chain that are exploring different uses for AI in web3.
* **How AI is being used to improve security for online gaming** ([Link](https://techfundingnews.com/how-ai-is-being-used-to-improve-security-for-online-gaming/)): Cybersecurity is a strong use case for AI/ML and with increasing fraud and theft in games this needs to grow.
* **Building an AI Solution for Quick Game Creation with Natural Language Using AWS with Exists** ([Link](https://aws.amazon.com/solutions/case-studies/exists-case-study/)): Exists demonstrates how it is using GenAI on AWS infrastructure to very quickly generate 3D games, something that could allow for consumer level fast game creation.

# **Content Worth Consuming**

1. **Yes, That Viral LinkedIn Post You Read Was Probably AI-Generated** ([Link](https://www.wired.com/story/linkedin-ai-generated-influencers/)): Microsoft’s embrace of AI has bled strongly into its ownership of LinkedIn and something to keep in mind when scrolling the site.
2. **2024: The State of Generative AI in the Enterprise** ([Link](https://menlovc.com/2024-the-state-of-generative-ai-in-the-enterprise/)): With a constant bombardment of marketing hype and doom scrolling it’s good to get some surveyed perspective on how AI integration is really going.
3. **Yes, That Viral LinkedIn Post You Read Was Probably AI-Generated** ([Link](https://www.wired.com/story/linkedin-ai-generated-influencers/)): Microsoft’s embrace of AI has bled strongly into its ownership of LinkedIn and something to keep in mind when scrolling the site.
4. **How AI is transforming the personalised ads industry** ([Link](https://bensbites.com/blog/how-ai-is-transforming-the-personalised-ads-industry)): Beyond cheap creatives generation, AI is being leveraged towards increasing personalization at a scale that human marketers simply can’t do.
5. **AI NPCs: The Future of Game Characters** ([Link](https://naavik.co/digest/ai-npcs-the-future-of-game-characters/)): A great breakdown of the current and future state of using AI for game characters with some useful examples.