**AI x Gaming**

**Week of February 17th, 2024**

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

**Key News Item #1:** Microsoft Muse ([Link](https://www.microsoft.com/en-us/research/blog/introducing-muse-our-first-generative-ai-model-designed-for-gameplay-ideation/))

* Microsoft published a paper in Nature detailing its experimental gameplay generation tool, Muse. Muse is touted as the first World and Human Action Model (WHAM) which refers to its ability to incorporate both world modeling and player action relationships to simulate gameplay in a virtual world. The model was trained in partnership with acclaimed developers Ninja Theory using 7 years worth of content from older multiplayer game Bleeding Edge.
* While the model isn’t really being proposed to generate actual game content yet, it has proven more consistent than previous models both in persistence of the world/objects and ability to run for two minutes before becoming unstable. Unfortunately the game simulation only runs at 10 FPS and at a tiny resolution of 300 x 180 pixels, leaving a lot to be desired before becoming usable gameplay.
* Microsoft is open sourcing the weights and sample data and allowing developers to play around with the WHAM Demonstrator visual interface on Azure AI Foundry. Having access to toy around with the model definitely beats simply seeing a brief video demonstration and can allow for really seeing where the tech might go next.
* Even with such a huge gap between this model and real games, it definitely shows how fast this space is evolving between Microsoft and Google. With the current iteration there’s no chance of any developers losing jobs over the result, but there is clear eventual potential to use these kinds of models and tools in pre-production to simulate an idea/experience and produce a vision of the gameplay.
* Phil Spencer also sees potential in a little bit of a farfetched idea, using it for game preservation by training the model on a game that might not be accessible on modern platforms anymore. This helps highlight a potential problem with surface level learning from watching games and seeing inputs, lack of awareness of hidden mechanics and variables that represent a majority of game systems. Visually copying a game and responding roughly similarly is a far cry from actually replicating the complex experiences games really are.
* **Why does this matter to AI x Gaming:** The ability to roughly replicate game-like experiences on demand has some potential uses for game developers such as visualizing and experiencing somewhat realistic prototypes. However, tools like this are unlikely to be used for real game development itself, especially due to it being a somewhat generic output like most AI art. The WHAM concept does have potential to branch into other useful tools for game developers beyond content generation.

**Key News Item #2:** xAI Game dev ([Link](https://www.tomshardware.com/tech-industry/artificial-intelligence/musk-announces-grok-3-powered-xai-gaming-studio-to-develop-ai-games-with-photo-realistic-graphics))

* As part of Elon Musk’s recent Grok 3 showcase, he extended his previous statements around creating AI generated games. This included a demonstration of using Grok to generate basic replicas of Tetris and older game Bubble Trouble in Python. He also used it to demonstrate a unique combination of Tetris and Bejeweled to show off its ability to do more than just replicate an existing game. A user with early access to Grok also [demonstrated a mario-like game](https://x.com/imPenny2x/status/1891708436972196160) he created with Grok.
* He didn’t get into the details of what the xAI game studio might do or how it might operate, but he did say specifically "We're launching an AI gaming studio at xAI. If you're interested in joining us in building AI games, please join xAI." There are currently just nine members of the team, which is actually quite a few given Elon’s tendency towards lean teams.
* Some of this was definitely for show just to demonstrate flexibility as it’s not fundamentally different from some of the things ChatGPT and Claude are capable of, but benchmarks do show that the model is now the current leader in the LLM space and especially strong at reasoning tasks. He also stated ambitions towards photorealistic graphics generation compared to the simplistic 2D retro graphics used in the demonstration.
* **Why does this matter to AI x Gaming:** Whether or not Elon can realistically accomplish his goal anytime soon he tends to inspire others including employees. It's not impossible to eventually get to a place where many elements of a game can be made using AI heavily, headed by a man who popularized electric cars, private space travel and brain computer interfaces.

# **Other News Items**

* **The New York Times is testing AI, but journalists are still in control** ([Link](https://www.mindstream.news/p/the-new-york-times-is-testing-ai-but-journalists-are-still-in-control)): Despite being vocal about AI hurting newspapers, NYT has flipped and will now be embracing it.
* **Amazon has put its next-gen Alexa on hold, Apple’s Siri upgrade delayed** ([Link](https://www.pymnts.com/apple/2025/apple-reportedly-battling-bugs-holding-back-long-awaited-siri-upgrade/)): Both of the leading voice based AI assistants are struggling to get the next gen version’s release ready.
* **Meta’s brain-to-text tech is here. We are not remotely ready** ([Link](https://www.vox.com/future-perfect/400146/meta-brain-reading-neurotech-privacy)): Meta used fMRI machines and an LLM to read an unspoken sentence from the subject's minds.
* **US' First Major AI Copyright Ruling** ([Link](https://www.jdsupra.com/legalnews/surprise-move-judge-walks-back-ai-6219521/)): More continued shifting on evaluations of copyright in respect to GenAI usage.
* **The EU AI Act is Coming to America** ([Link](https://tracking.tldrnewsletter.com/CL0/https:%2F%2Fwww.hyperdimensional.co%2Fp%2Fthe-eu-ai-act-is-coming-to-america%3Futm_source=tldrai/1/010001951965706f-17105f26-7124-4327-9e46-373a12e60a54-000000/fdAX3fDbhGJC9vJMJv-TFds_WDfC1oXOxYbBKU7hq18=392)): AI is going to lead to a lot of legislation regardless of the current administration and unlike blockchain it’s unlikely to be dragged out indefinitely.

# **Content Worth Consuming**

* **Grok 3 Overview** ([Link](https://www.analyticsvidhya.com/blog/2025/02/grok-3/)):
  + Grok 3 might only be an incremental improvement on the existing public models, but it managed to get to that point fairly quickly given how late of an entry Grok was to the LLM game. Having this level of competition continually showing up without just being a DeepSeek style distillation model is helping ensure everyone has to keep improving. The only downside is that everyone seems to be headed down the same multi-path routes now providing tit-for-tat solutions for general chat, reasoning, image generation and agentic research. Grok is currently the only model that will be tested by its creator for game development however, which might lead to some divergence. It’s also worth noting that Grok does offer a difference in terms of an attempt to move away from potential biases despite still having some that are a side effect of AI training.
  + While there are plenty of fudging benchmarks for many of these models, including Grok 3, the initial reactions seem to be pretty positive that it's at least as good as OpenAI’s models on most things, better on some, and only a little behind on Deep Research. Given the speed at which the model went from Grok 2 to Grok 3, it’s entirely possible that GPT-5 and Claude 4 help push towards a Grok 4 within the year.
* **ChatGPT comes to 500,000 new users in OpenAI's largest AI education deal yet** ([Link](https://arstechnica.com/ai/2025/02/chatgpt-comes-to-500000-new-users-in-openais-largest-ai-education-deal-yet/)):
  + As jobs go through a serious period of self-reflection that really started during COVID there will be a serious need for AI literacy and skill development to remain relevant for many. Incorporating some elements of AI usage into classes will be critical because AI is going to be used regardless, much like the calculator with math. A similar parallel of dejection and eventual acceptance can be seen with computers and internet access in schools. At first they were sidelined to small computer labs with low usage time, but eventually the necessity of computer and internet research skills drove some level of adoption. It also makes a difference that smartphones have enabled many kids to have a computer in their pockets which now includes AI access.
  + Closed source companies like OpenAI have incentive to try and make sure their models are the ones used in schools to further entrench their leads and become the default for growing minds. Getting a good wedge into education is difficult but worthwhile as kids who learn on these products will often think in terms of that product. There is plenty of room for disruption though if the model diminishes in competitive edge as AltaVista and Yahoo vs Google showed. The big risk here is accuracy and bias in models as kids learn to trust these models without much in the way of fact checking in a way that could be far harder to evaluate than typical internet sources.
* **Disrupting malicious uses of AI** ([Link](https://openai.com/global-affairs/disrupting-malicious-uses-of-ai/)):
  + OpenAI published a new report on the different malicious uses of AI it has been attempting to thwart. While a long report it’s useful to see the different attempts to use AI maliciously and how OpenAI are trying to curtail the use. As AI increases societal penetration this will become increasingly problematic alongside other GenAI like deepfakes, cat-fishing and code for cyberattacks. Understanding where the edges are being pushed and pushed back on can help get an idea of where society may see significant shifts in both technology and regulation. Realistically neither can fully solve problematic uses of technology so papers like this also serve as an early warning on issues to prepare yourself for.