# Nvidia unveils new AI model Fugatto for music and audio generation



Nvidia unveiled a new artificial intelligence model named Fugatto on Monday, designed specifically for the generation of music and audio. This innovative technology is aimed at audio producers across various fields, including music, film, and video game industries. The announcement was made in Santa Clara, California, where Nvidia, the leading supplier of chips and software for AI systems, showcased the model’s capabilities.

Fugatto, short for Foundational Generative Audio Transformer Opus 1, can create sound effects and music based on textual descriptions. For instance, it has the unique ability to generate novel sounds, such as simulating a trumpet that barks like a dog. This capability distinguishes it from existing AI technologies, particularly its advanced feature to modify pre-existing audio. For example, it can convert a piano melody into a tune sung by a human voice or alter a spoken word recording to reflect different accents or emotional tones.

Bryan Catanzaro, vice president of applied deep learning research at Nvidia, commented on the potential impact of generative AI, stating that it is poised to enhance creative avenues in music, video games, and for everyday creators. He remarked, “If we think about synthetic audio over the past 50 years, music sounds different now because of computers, because of synthesizers. I think that generative AI is going to bring new capabilities to music, to video games and to ordinary folks that want to create things.”

Despite these advancements, Nvidia announced it does not have immediate plans to publicly release Fugatto. The company is still deliberating over how and when to make the model available, especially in light of concerns regarding the potential misuse of generative technologies. Catanzaro emphasised the importance of caution, stating that “any generative technology always carries some risks, because people might use that to generate things that we would prefer they don't.” He noted that safeguarding against the generation of misinformation or the infringement of copyrights remains a complex challenge for creators of generative AI models.

Nvidia joins a growing number of companies, including startups like Runway and larger enterprises such as Meta Platforms, that are developing technologies capable of generating audio and video content from text prompts. The relationship between technology firms and the Hollywood entertainment industry remains nuanced, particularly following controversies surrounding the use of AI in imitating voices, which has drawn criticism from high-profile figures like actress Scarlett Johansson.

As the conversation around AI in creative arts continues to evolve, industry leaders are grappling with the ethical implications of these advancements and the necessity for frameworks to mitigate potential abuses. For now, the future of Fugatto and similar technologies remains on the horizon, as creators, businesses, and industries consider their next steps in integrating these transformative tools into their operations.

Source: [Noah Wire Services](https://www.noahwire.com)

## References

* <https://www.independent.co.uk/tech/ai-music-nvidia-fugatto-audio-generator-b2653769.html> - Corroborates the announcement of Nvidia's Fugatto AI model and its capabilities in generating and transforming audio.
* <https://www.musicbusinessworldwide.com/nvidia-unveils-ai-audio-generator-fugatto-that-can-produce-sounds-never-heard-before/> - Details Fugatto's ability to generate novel sounds and modify pre-existing audio, such as converting a train sound into a string orchestra.
* <https://blogs.nvidia.com/blog/fugatto-gen-ai-sound-model/> - Explains Fugatto's features, including its ability to create music snippets from text prompts and modify voice characteristics.
* <https://www.tomsguide.com/ai/meet-fugatto-an-impressive-new-ai-sound-model-from-nvidia> - Describes Fugatto's innovative features, such as generating complex sound effects and its use of ComposableART for combining instructions.
* <https://www.independent.co.uk/tech/ai-music-nvidia-fugatto-audio-generator-b2653769.html> - Quotes from Ido Zmishlany and Rafael Valle highlighting the creative potential and development process of Fugatto.
* <https://www.musicbusinessworldwide.com/nvidia-unveils-ai-audio-generator-fugatto-that-can-produce-sounds-never-heard-before/> - Mentions the training process of Fugatto using millions of audio samples and its development by an international team of researchers.
* <https://blogs.nvidia.com/blog/fugatto-gen-ai-sound-model/> - Details the technical aspects of Fugatto, including its 2.5 billion parameters and training on NVIDIA DGX systems.
* <https://www.tomsguide.com/ai/meet-fugatto-an-impressive-new-ai-sound-model-from-nvidia> - Discusses the potential applications of Fugatto in various industries, including music production, advertising, and video game development.
* <https://www.independent.co.uk/tech/ai-music-nvidia-fugatto-audio-generator-b2653769.html> - Addresses concerns about the impact of generative AI on creative industries and potential misuse, aligning with Nvidia's cautious approach to public release.
* <https://www.musicbusinessworldwide.com/nvidia-unveils-ai-audio-generator-fugatto-that-can-produce-sounds-never-heard-before/> - Highlights the broader context of AI development in the tech industry, including other companies like Stability AI, OpenAI, and DeepMind.
* <https://blogs.nvidia.com/blog/fugatto-gen-ai-sound-model/> - Provides insights into the ethical and practical considerations surrounding the release and use of Fugatto, echoing the need for caution and frameworks to mitigate abuses.
* <https://news.google.com/rss/articles/CBMimAJBVV95cUxNNzFvM2paZ2NhSk9fTzdFcnRIMlRsWW5WVXNPc2ZLWkozTVAxdmt1WXVrc2RxbzhRLUt0SXFGRU1UQlVYeVFuNVdXQWZoSk9odnVuYV9seFlNZlJYTEwwS3AycU5xbGpLcFN6R3FWbXpaRXpXUWdCTC1UdXBaQ1dIZXRZSC0zVU1zZzJSUlFlWHNGUTcwYmFjWFhhdFlJd3daLVRpMnhSOGZwUzJZT3FYbEtWb0FTVXhPbzVwMVpoRk9KdGlMeEpsa0l3ZmJHNjR0R2NiQVZOeG1FWlZlbDhYM211M293X0p2enpJLU9OZFFfeDgxOVFHTkpYZkRlUmpYSm9PTEJTRGFMWkMtS2FwOVMwNlRXNW9N0gHkAUFVX3lxTFBvUjhObnRQb0FoR1hmRjA1Y2ZROGZNTTJTc19UUUIyMjh6RHV5cEtteGxXdWpvWGNsNDBQcTJuS01jVDJkdWw3cVNtdjVkNzBGM2d4ZEFGbEh0eWVQeHExaDRxMGJqRlMxSEtUcWprTU4xbGZGeXN3WTlpNFFEU0QtQ2Q3bzdaelNuVzdpNUlBM2tlUFh3U3BNQTNnYUZwRHBmRUlnSV9raXdCUUR0b1BqTG9RTFFrTHFpaWpsd0VraUljRFJxWklTeTNkNlJTRXdRX1BGVzRtdkJvZ0pyZ2MyNElsdA?oc=5&hl=en-US&gl=US&ceid=US:en> - Please view link - unable to able to access data