









Al Completes Beethoven's 10th Symphony

Artificial Intelligence (AI) has been used in multiple industries. One such industry is music. AI has been used to generate songs and music from current and dead musicians.

After almost two centuries, Beethoven's Tenth Symphony was "completed" by AI and premiered on October 9th, 2021.

MUSIC NEWS

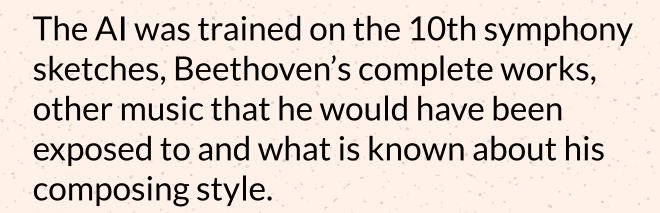
Team uses AI to complete Beethoven's unfinished masterpiece

October 2, 2021 · 5:20 PM ET Heard on All Things Considered





Artificial intelligence has completed Beethoven's Tenth Symphony—or at least, what that piece of music could have sounded like had he finished it.



What the AI had to do:

- Had to harmonize melodic lines
- Expand musical phrases
- Use proper musical form
- Decide which instruments would play which part
- Bridge two sections of a piece together
- Write a suitable musical conclusion/ending

All of this in a way that someone like Beethoven would have done







"What death does to a legacy is that it can increase the legal conflicts, the cultural conflicts, who owns the artist and who gets to define who he is," - Arun Saldanha





There have been many recent issues with how to handle releasing music from artists who have passed on.

MUSIC ENTERTA

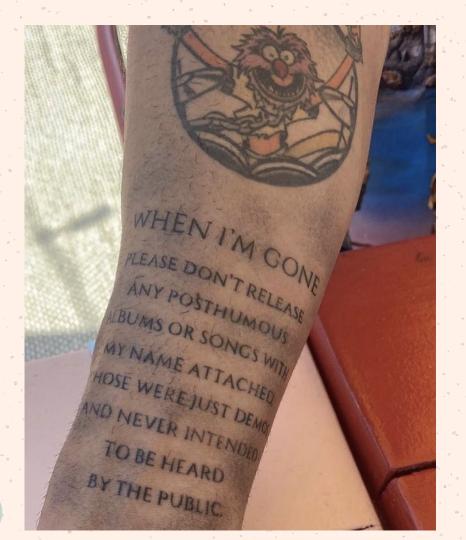
What would Prince want? Two years later, his estate is a mess and his legacy unclear

"I don't live in the past. . . I make a statement, then move on to the next." - Prince









Tattoo of Anderson.Paak.

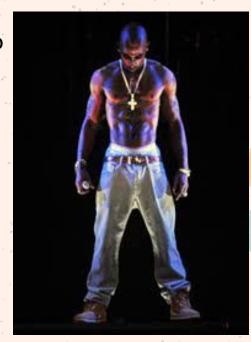
Other pop artists like Dua Lipa have gone on record to say that it is in her will to not have any posthumous work of her released.



At Coachella, on April 15, 2012, Tupac appeared alongside Snoop Dogg and Dr. Dre. They performed two songs, "Hail Mary" and "2 of Amerikaz Most Wanted".

"There exists a token of beauty in letting Pac's music speak for itself, and not grafting a false image onto his classic sounds simply because we missed Tupac perform when he was alive and want to see him now."

"The hologram made me uncomfortable because Pac's life was special, and that unique flame has been extinguished. Why do we need to watch an imitation of Tupac when we have an incomparable plethora of his own art at our disposal?"



Which one was Al?





Pros

- Can complete unfinished works
 - Schubert Unfinished Symphony(?)
- Pushed limits of what an AI can do
- Critically Successful
 (Most could not tell where Beethoven ends and AI begins)
- Well within the public domain. No copyright issues
- Exposing current generation to past music
- Creative possibilities
 - > Hear historical artists in new context





Cons

- Privilege Only those with access to these resources
 could be able to accomplish this work
- Permission No one can know that Beethoven would have wanted this to happen
- Product This is not being promoted as a model generating music in the style of Beethoven. It is being publicized as his finished "10th Symphony"

Cons

- Technically proficient but lacking in human touch.
- Artists evolve, so to train a model on past Beethoven works means you will get something which evokes his past, not where he was going.
 - This is a representation of what an AI model has identified as being quintessential Beethoven, but ultimately is a black box so we don't know what that is.
 - Curated output A human ultimately had to select the final product that would be presented to the world.







Never Gonna Give You Up

https://uberduck.ai/

Website that is a text to speech generator. It uses popular real and fiction characters, such as:

- Shrek
- John Legend
- Cookie Monster
- Alexa
- Rick Astley

It claims it is not to be used for commercial purposes and a request can be made to take down someone's voice if there are "legitimate reasons"



Uberduck does include the option to use the voices of 11 dead





2Pac Juice WLRD Biggie Smalls Eazy E Big L MF DOOM Guru Lil Peep Nipsey Hustle Ol Dirty Bastard **XXXtentacion**



Sources



(www.dw.com), D. W. (n.d.). *Beethoven's Last Symphony finished by AI: DW: 09.10.2021*. DW.COM. Retrieved November 22, 2021, from https://www.dw.com/en/beethovens-last-symphony-finished-by-ai/a-59412362.

Goodyer, J. (2021, October 14). *How an AI finished Beethoven's last symphony and what that means for the future of Music.* BBC Science Focus Magazine. Retrieved November 22, 2021, from https://www.sciencefocus.com/news/ai-beethovens-symphony/.

Jeffrey, C. (2021, September 30). *Music scholars and computer scientists completed Beethoven's Tenth Symphony aided by Machine Learning*. TechSpot. Retrieved November 22, 2021, from https://www.techspot.com/news/91493-music-scholars-computer-scientists-completed-beethoven-tenth-symphony.html.

NPR. (2021, October 2). *Team uses AI to complete Beethoven's unfinished masterpiece*. NPR. Retrieved November 22, 2021, from https://www.npr.org/2021/10/02/1042742330/team-uses-ai-to-complete-beethovens-unfinished-masterpiece.

(www.dw.com), D. W. (n.d.). *Beethoven's Last Symphony finished by AI: DW: 09.10.2021*. DW.COM. Retrieved November 22, 2021, from https://www.dw.com/en/beethovens-last-symphony-finished-by-ai/a-59412362.

https://www.chicagotribune.com/entertainment/music/ct-prince-legacy-unclear-20180419-story.html

https://www.billboard.com/music/music-news/opinion-the-problem-with-the-tupac-hologram-494288/

