

Can Computers Create Art?

An essay by Aaron Hertzmann

Summarized by

Davíð Freyr Björnsson

and Eric Guldbrand

An overview

- “Could a piece of computer software ever be widely credited as the author of an artwork?”
- Has this happened in the past or present?
- Will this happen in the future?

A brief history of art and tech

- Film has always been a back-and-forth with technology improvements
- Procedural art has been around for a long time and the tools used have advanced a lot.
- Tools have never been viewed as being the artist.



What is art?

- Quality of the work
- Intent
- Social activity
- Growth of artist

Nature and animal-made “art”



AI today

- Significant advancement in computational artistic image synthesis in recent years. But should not be mistaken for an AI artist.
- Modern AI essentially fits curves to datapoints
- Current AI methods are tools in the hands of artists



Gatys, Leon A., Alexander S. Ecker, and Matthias Bethge. "Image style transfer using convolutional neural networks." *Proceedings of the IEEE conference on computer vision and pattern recognition*. 2016.



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Will AI ever be considered an artist?

- Can AI create art?
- Needs to be perceived as a social agent
- History indicates that AI will more likely be a new tool for artists



Image from the Deep Dream Generator gallery.