

Deep Learning and the *Art*

Talk at the

AI&Art Pavilion Esch2022

Kick-off Meeting, 25 September 2020

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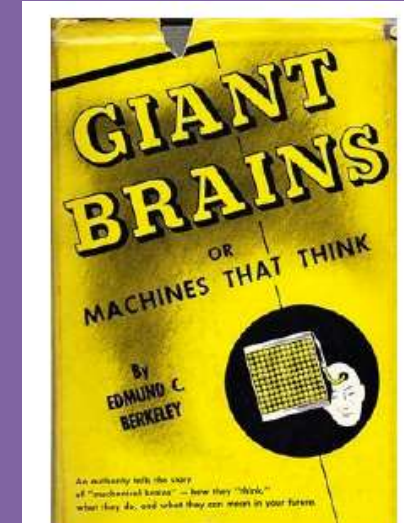
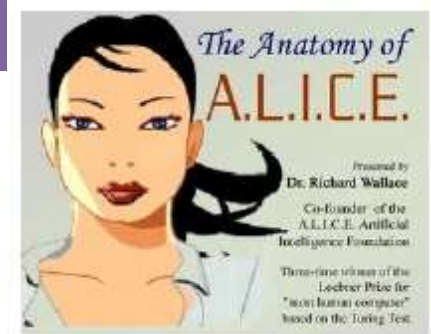


Course: “Machine Learning“, MICS3, 2019



Many thanks to Jiaqin, Jingjing, Mei, and Ze !!

A.I. History (selection)



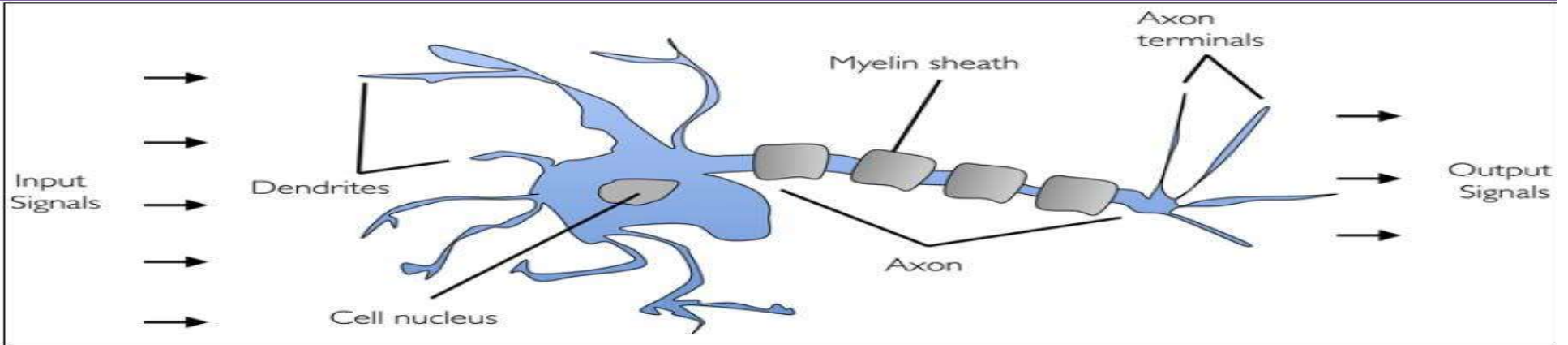
Walter Pitts



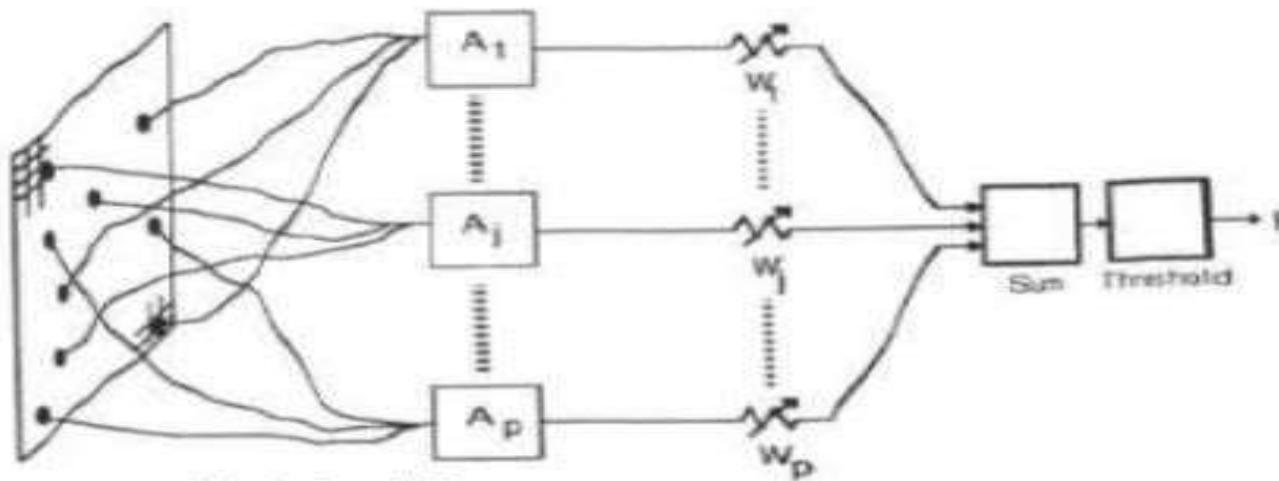
Warren McCulloch



A.I. History : Artificial Neural Networks



Perceptron (1957)

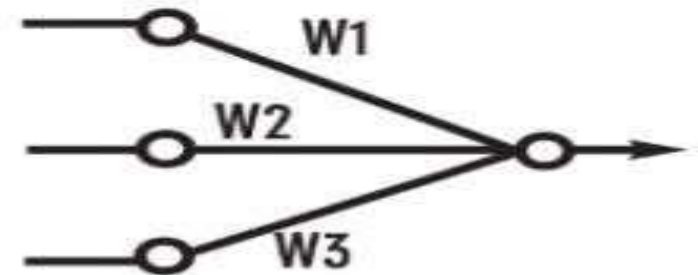


Frank Rosenblatt
(1928-1971)

Original Perceptron

(From Perceptrons by M. L. Minsky and S. Papert, 1969, Cambridge, MA: MIT Press. Copyright 1969 by MIT Press.)

Simplified model:



Harold Cohen and AARON, the machine



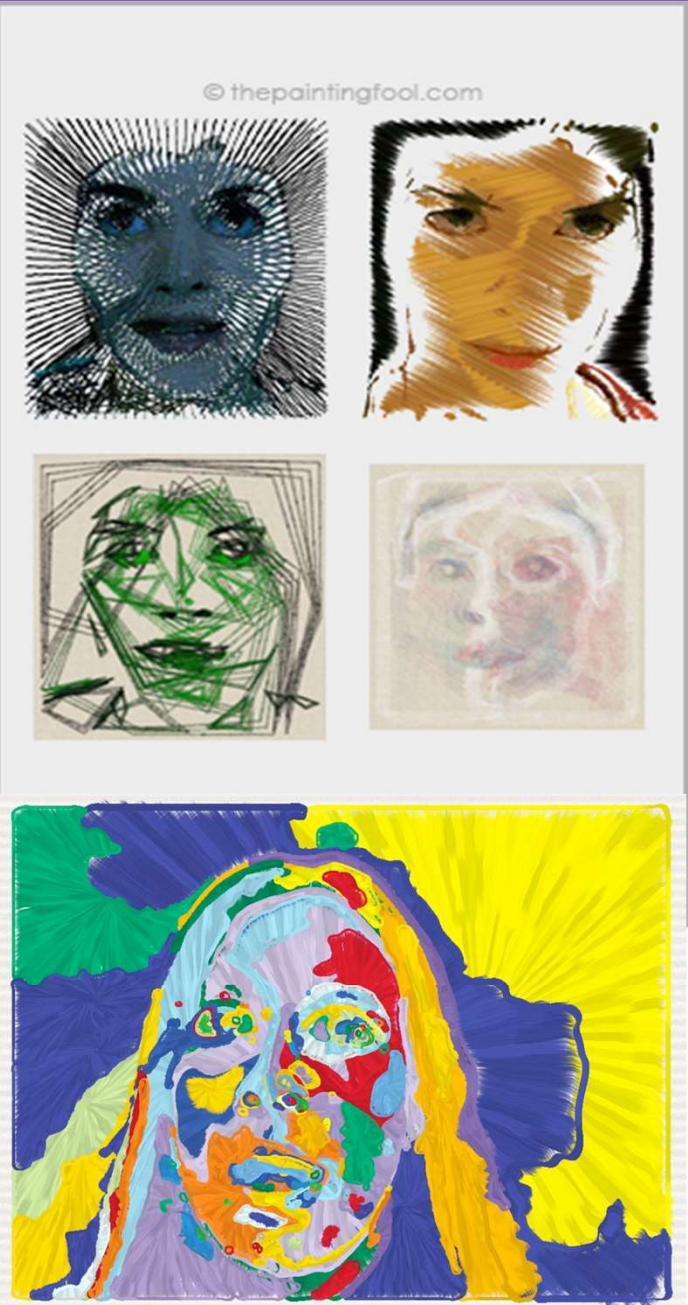
<https://www.nytimes.com/2016/05/07/arts/design/harold-cohen-a-pioneer-of-computer-generated-art-dies-at-87.html>

“The Painting Fool” by Simon Colton

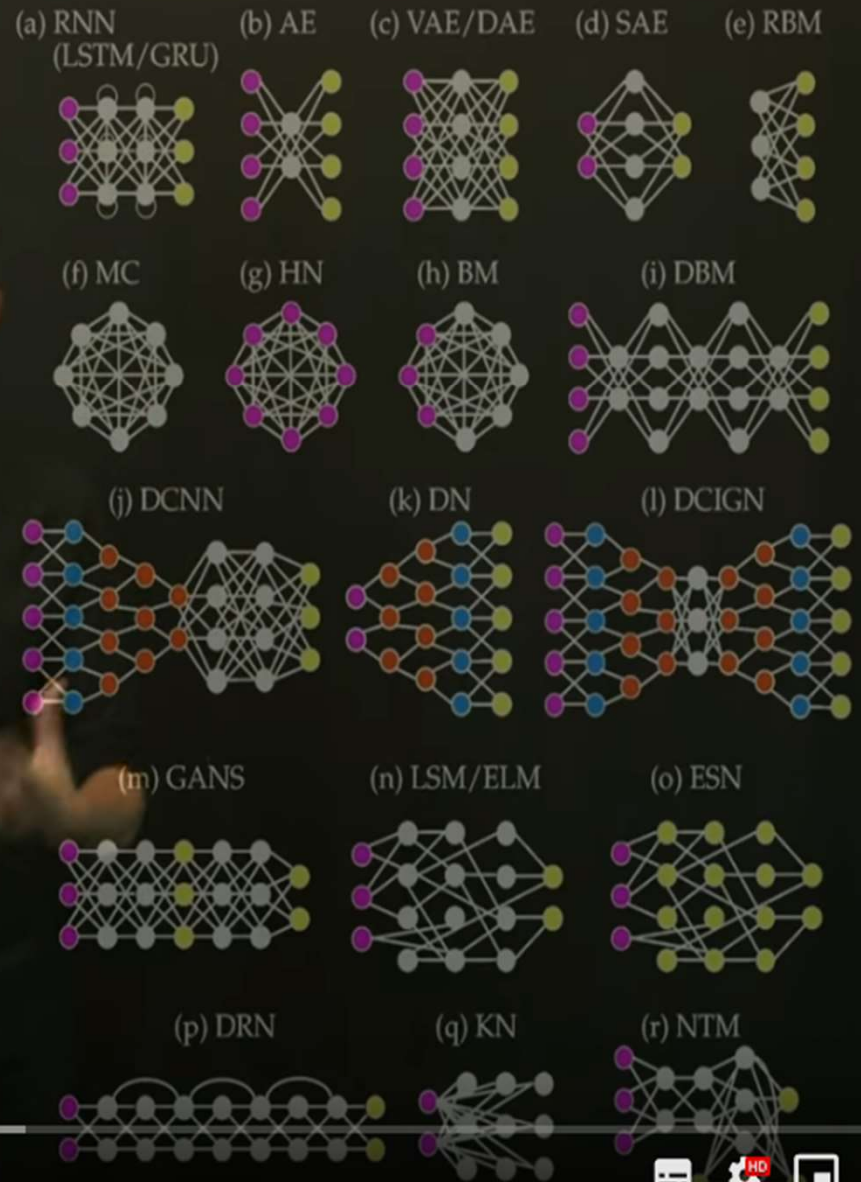
<http://www.thepaintingfool.com/about/>



Rather than simply being able to converse in a convincingly human manner (as Turing proposed), an “*artificially intelligent artist would have to behave in ways that were skillful, appreciative, and imaginative*”.



Deep Learning



3:45 / 9:08



Have a Deep Dream!



<https://www.youtube.com/embed/I2y6kS7396s>



<https://www.youtube.com/embed/I2y6kS7396s>

<https://www.youtube.com/embed/GzF45qSdT6Y>

“Break Free” by Taryn Southern, but “Made in AI”



<https://www.youtube.com/embed/XUs6CznN8pw>

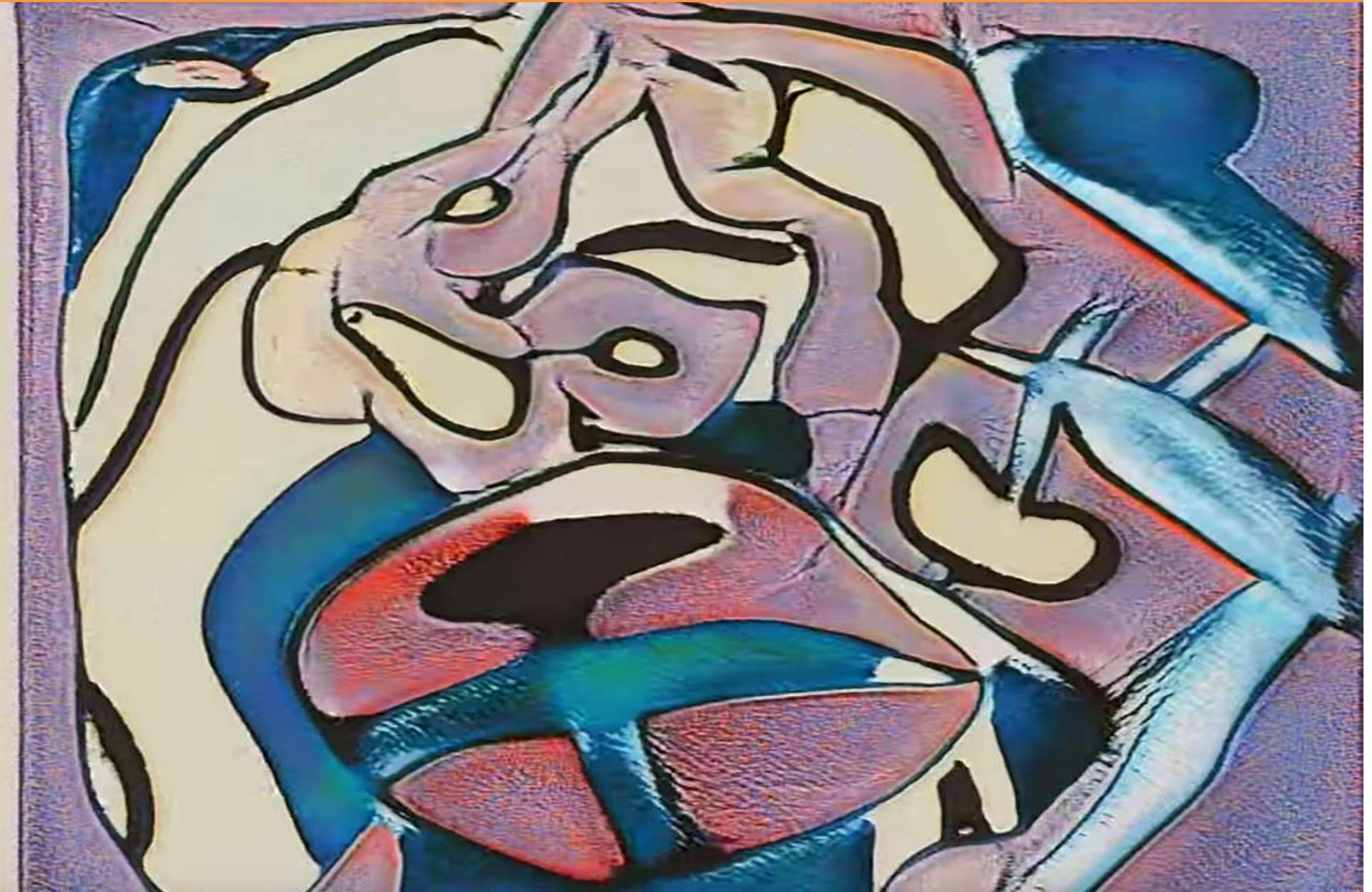
Break Free - Song Composed with AI | Taryn Southern

Jimmy Fallon: singing with Sophia, the robot



<https://www.youtube.com/embed/9Zq4FJXCqk>

When AI generated paintings dance to music...

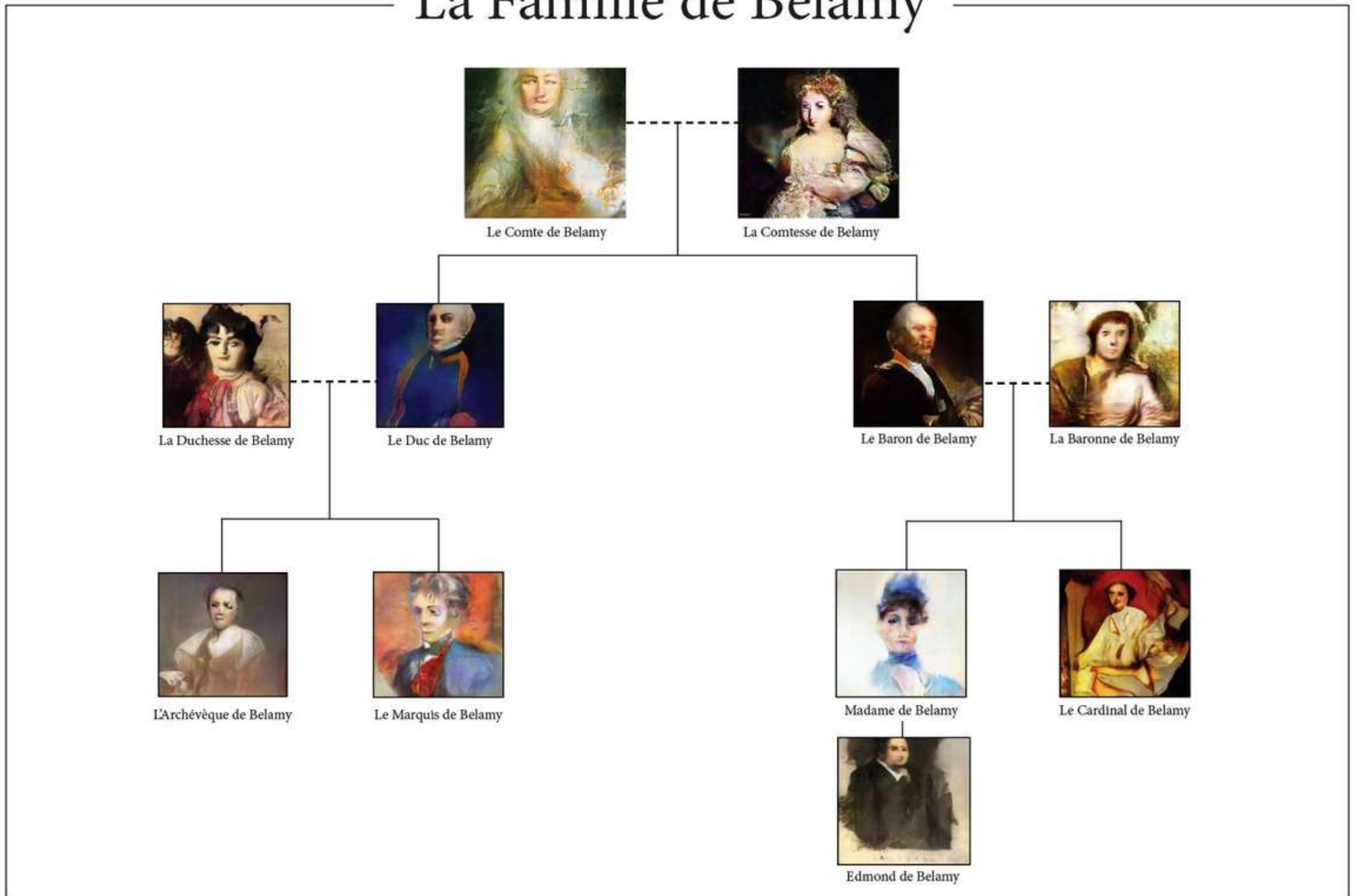


<https://www.youtube.com/embed/85l961MmY8Y> (2min 24sec)

Xander Steenbrugge, Neural Synesthesia

AI-based Painting

La Famille de Belamy



AI-based Painting

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Price realised ⓘ

USD 432,500

Estimate ⓘ

USD 7,000 - USD 10,000

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Artist: Obvious

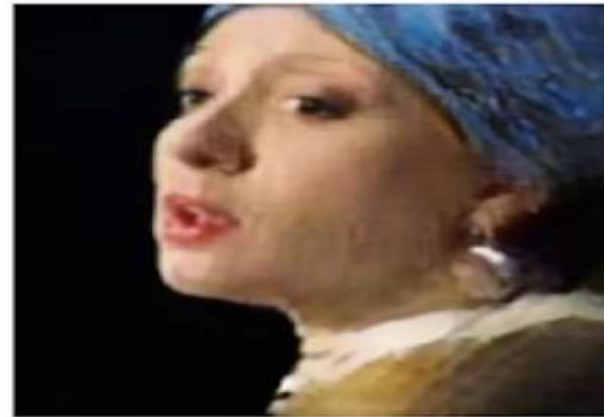
Medium: Ink

Subject: Male portrait

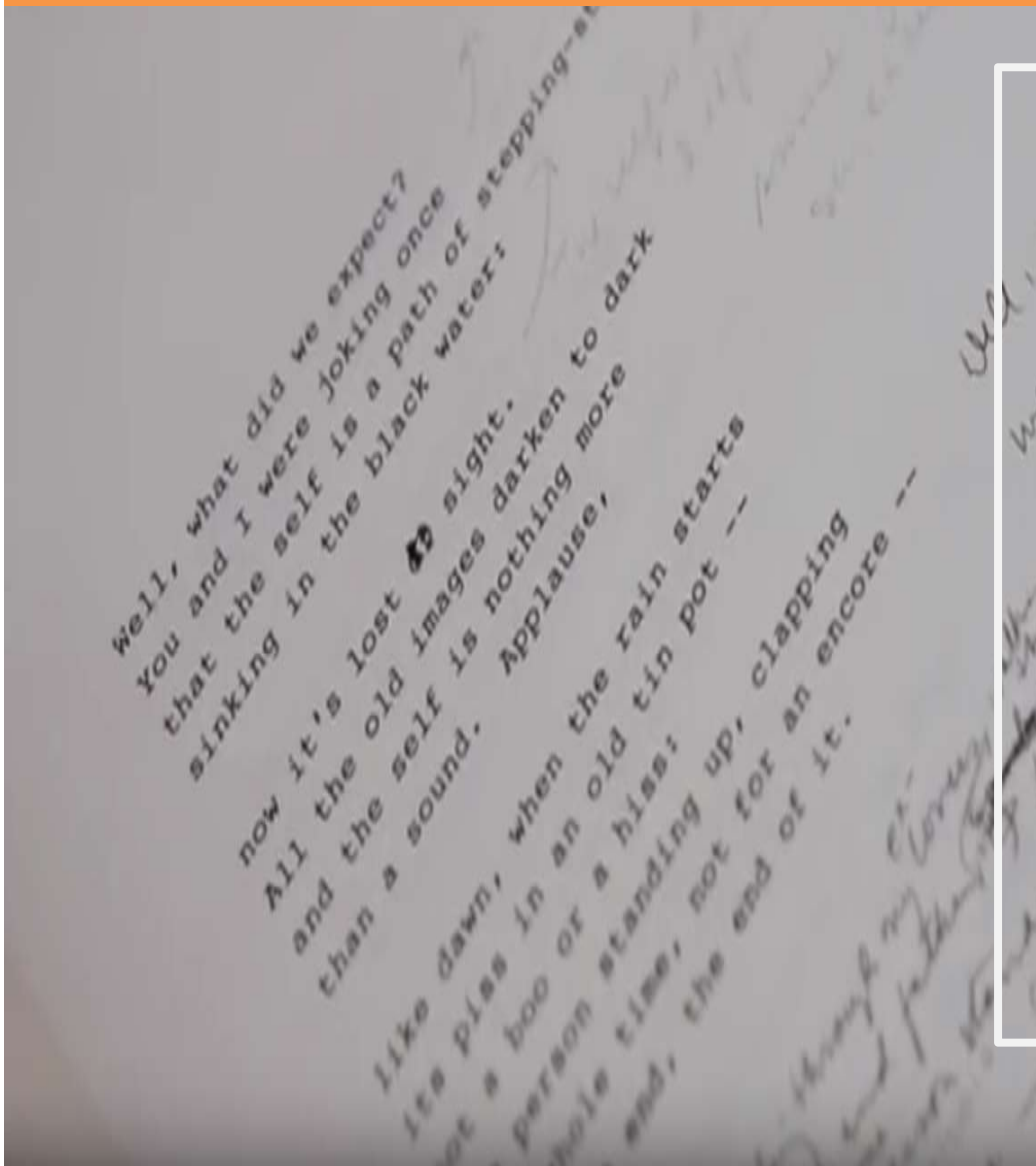
Dimensions: 70cm x 70cm

AI and Deep Fakes

Source: futurezone.at



Can AI write poetry?



*I wanna be a little kid again.
I'm feeling kinda empty on the low.
You should unwind a little now and then.
Team Stacie looking like a sleepy hoe.*

*Back to the Sunshine State. The devil is
a lie. I hate myself a lot sometimes,
I mean, possessive, holy shit, this is
the second time. I'm always catching dimes.*

*I'm not the only one, I'm pinning this
again. I love a windy sunny day.
Not coming out until tonight. I miss
the happy me. I gotta find a way.*

*I always fall into the bullshit. Why?
Socks on in bed—the devil is a lie.*

- <https://www.youtube.com/embed/WGt8MkeGpNA> 4min 55 sec
- <https://www.newyorker.com/culture/annals-of-inquiry/the-mechanical-muse>

Google Arts & Culture: Serpentine Summer Party

(organised by Es Devlin)

<https://www.youtube.com/embed/e-NUHlqmqUI>



<https://www.youtube.com/embed/RVyh1ewep84>

Performing Arts

with Mutaurya
Mapondera, Google
Creative Lab

<https://experiments.withgoogle.com/billtjonesai>

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SUBMIT EXPERIMENT

Body, Movement, Language: AI Sketches With Bill T. Jones

May 2019 | By Bill T. Jones & Google Creative Lab

PoseNet experiments made in collaboration with one of America's most celebrated and important artists.

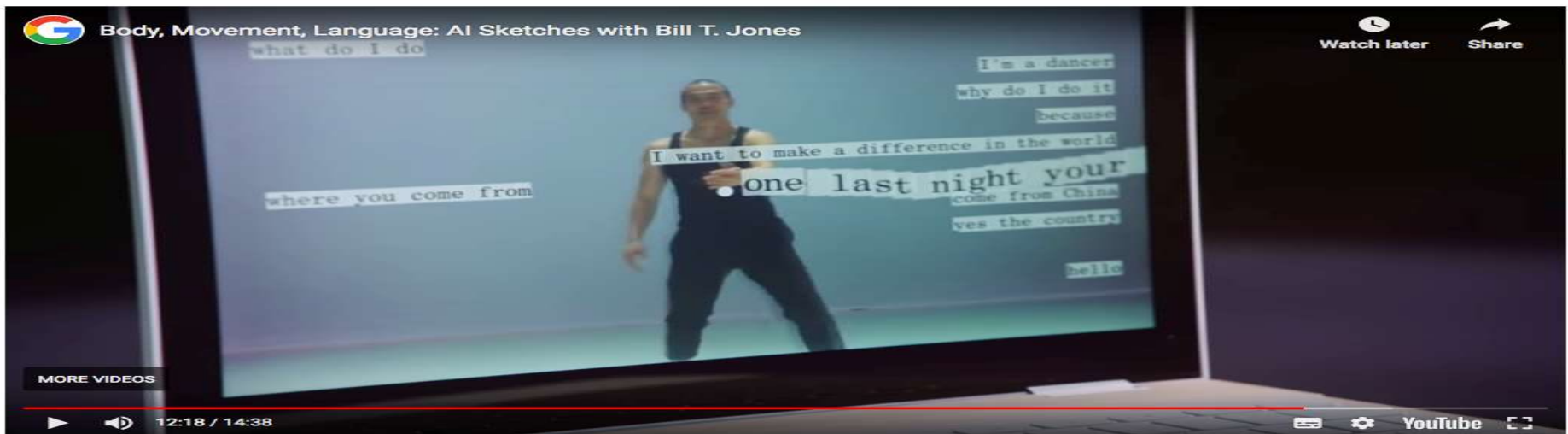
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AI Experiments

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LAUNCH EXPERIMENT

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Charisma.ai

<https://charisma.ai/projects>



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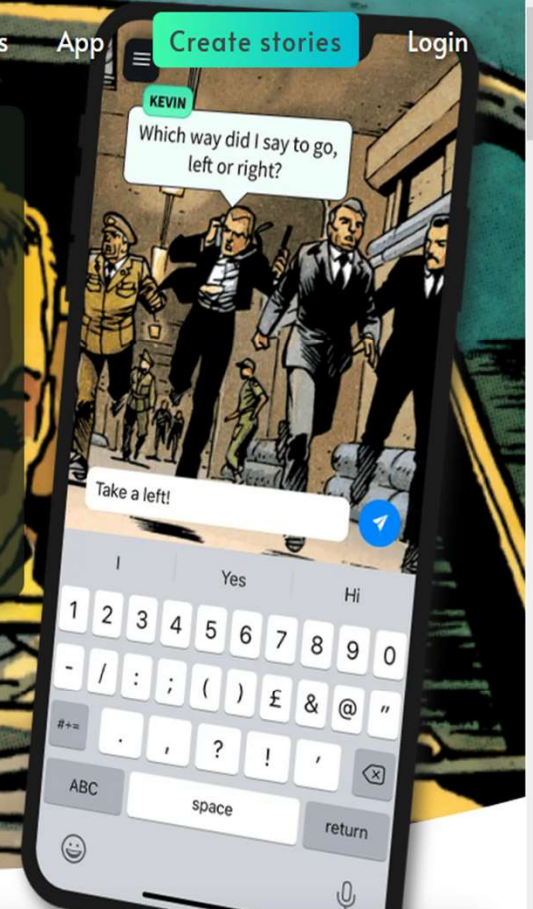
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AIVA

<https://www.youtube.com/embed/wYb3Wimn01s>



THE AGE OF AMAZEMENT
COMPOSED BY AIVA



Aiva Op. 3

Piano

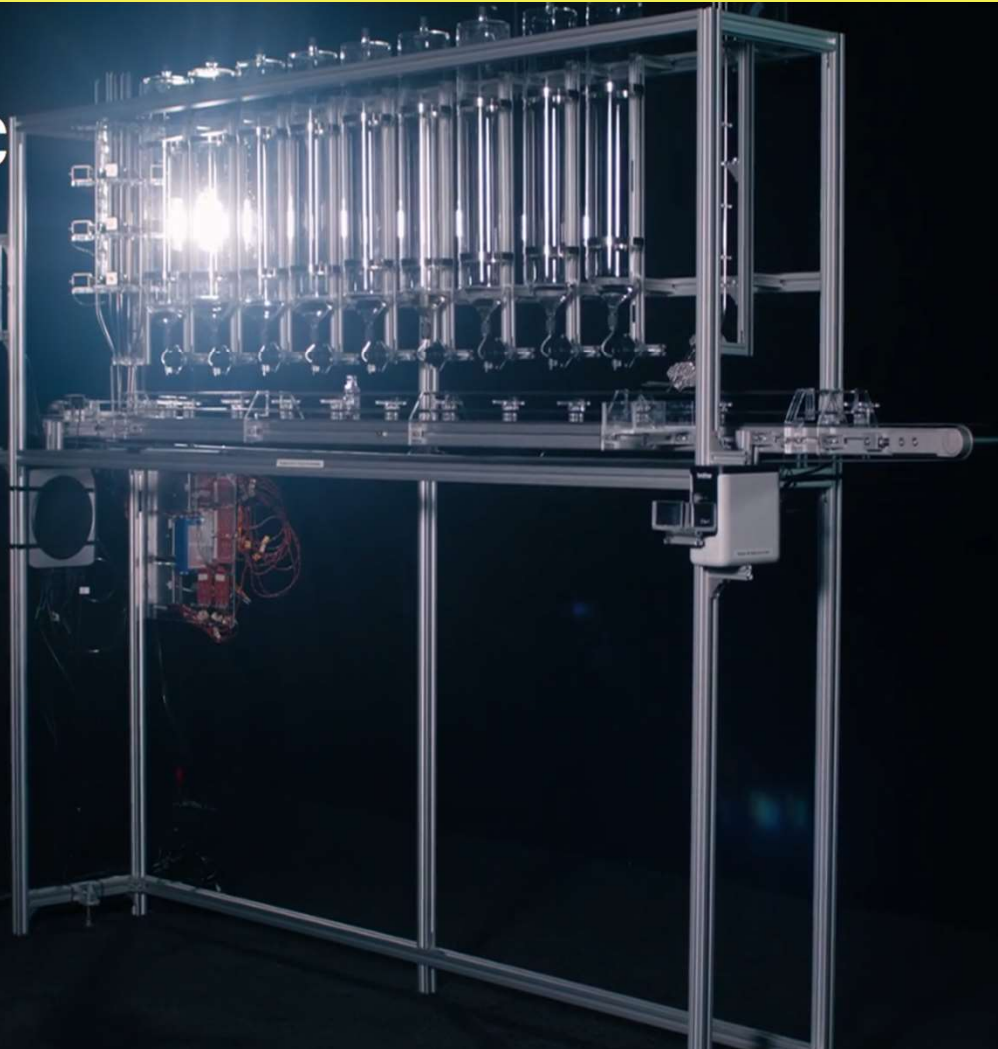


This is the preview of the score Op. n°3 for piano solo
"A little chamber music", composed by AIVA.

Algorithmic Perfumery

ScenTronix

Algorithmic Perfumery



info@scentronix.com



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Ginnekenstraat 61
4811 JE Breda
The Netherlands

The AI Painter

<https://www.instapainting.com/ai-painter>



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AI Painter

See your photo turned into artwork in seconds!

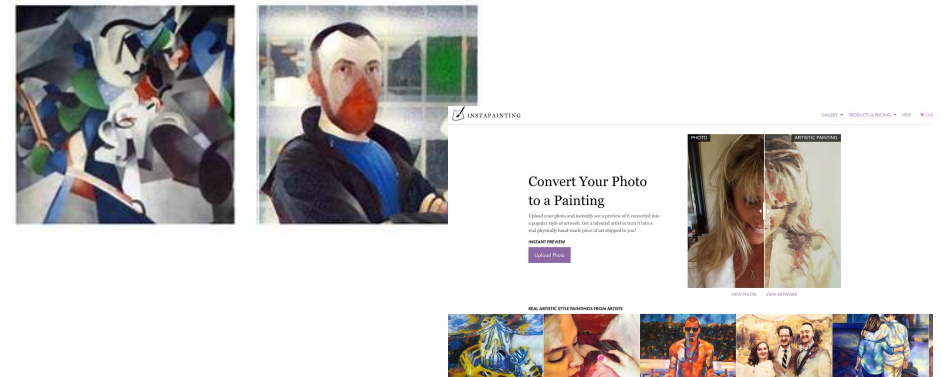
Neural Network Powered Photo to Painting

Last year we released the first free to use public demo based on the groundbreaking neural style transfer paper—just days after the first one was published!

Now you can preview our next iteration of the state of the art in computational artwork. **Our new tool allows you to see your photo turned into artwork in seconds**, and with just a few more clicks an artist can 100% physically paint it and ship it to your door too.

Our new technology is integrated into our instant artwork preview tool which you can launch below.

Launch AI Painter Artwork Tool





Stephanie Dinkins



Wayne McGregor



Joy Buolamwini



Sofia Crespo



Mimi Onuoha



Memo Akten



Taryn Southern



Ross Goodwin



Sarah Meyohas



Mike Tyka



Tom White



Lauren McCarthy



Pinar Van Arman



Alexander Reben



Jake Elwes



David Young



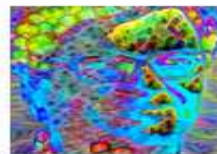
Daniel Ambrosi



Christian "Mia" Lachal



Dariusz Gross



Gene Kagan



Mario Klingemann



Scott Eaton



Sougwen Chung



Anna Ridler



Robbie Barrat



Ahmed Elgammal



Refik Anadol

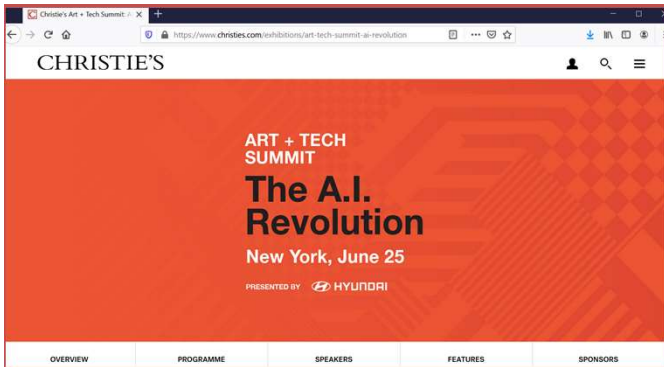
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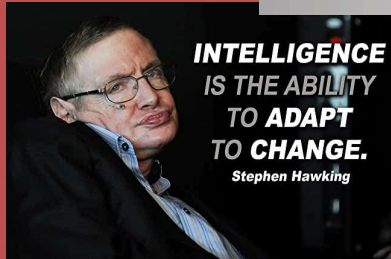
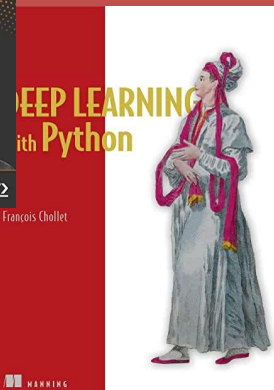
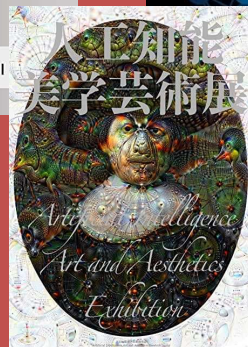
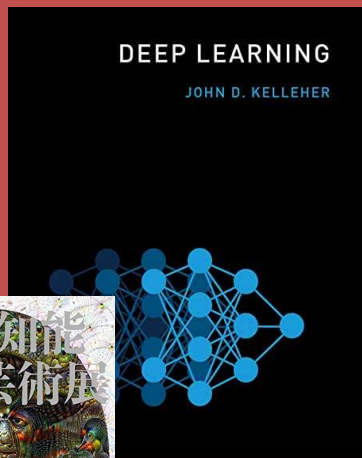
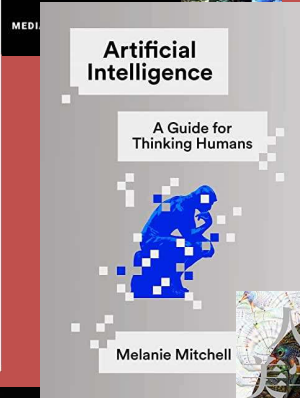
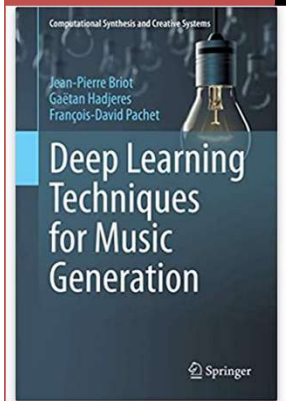
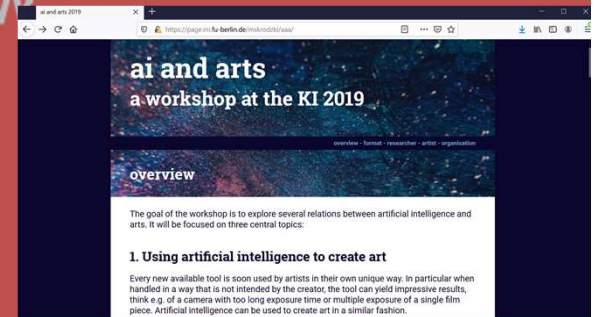
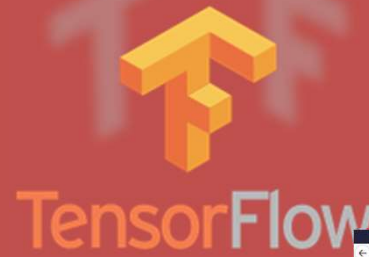
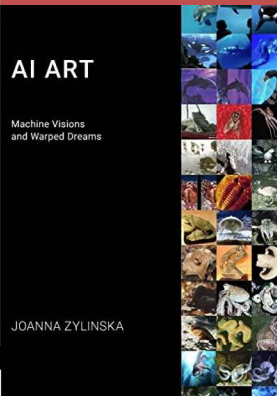
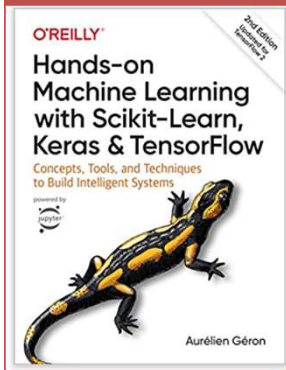


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References

<https://topten.ai/ai-painting-generators/>





Thank you for listening!