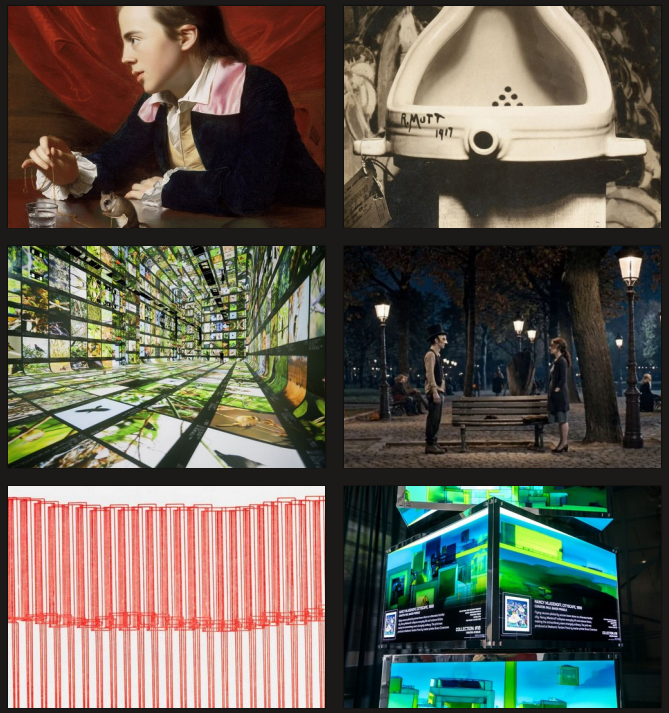
AMCC 5160 · LECTURE 10 · 3 NOVEMBER 2026

Is It Any Good?

Looking at, measuring, showing and signing AI art

Critique, evaluation and provenance · Fall 2026



Harry Yang · Division of Arts and Machine Creativity, HKUST · MIL13002

WARM-UP · 1 MINUTE

Rate this picture from 1 to 10. Hold up your fingers.

Do not think too hard. Remember your number.



Now you know: it won a prize, then it was refused copyright



2022 · First prize

Jason Allen's Théâtre D'opéra Spatial wins the digital art category at the Colorado State Fair. Made with Midjourney.

624 prompts

Allen says he refined it with at least 624 prompts, then edited it. He credited Midjourney; the judges did not know it was AI.

2026: still in court

The judges later said they would have given the prize anyway. The US Copyright Office refused to register it. Allen v. Perlmutter is still pending.

Hold up your number again. Did it move? If it moved, the picture did not change. You did.

Sources: US Copyright Office review board letter (Sept 2023); New York Times, 2 Sept 2022; Mayer Brown, "Supreme Court denies review in AI authorship case", 11 March 2026.

Four stories from this year



1 Looking

How to critique an AI work. Baudelaire to “slop” to the Pope, last month.



2 Measuring

FID, VBench, Elo. What scores miss, and how taste got into the models.



3 Showing

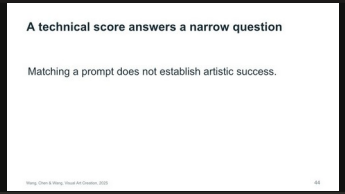
Dataland, a 900-signature letter, Vera Molnár at the V&A, and the film that won at Venice.



4 Signing

A science prize taken back last month. How C2PA and SynthID work, and how to credit your work.

Where we've been: you have already asked this question



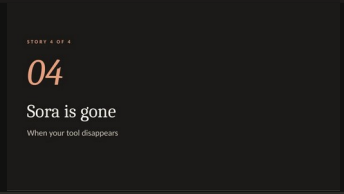
Lecture 04

A technical score answers a narrow question.



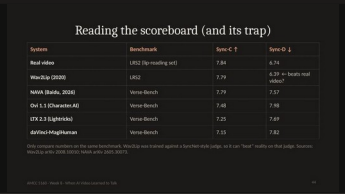
Lecture 05

Whose model is it? Rutkowski, making a model forget.



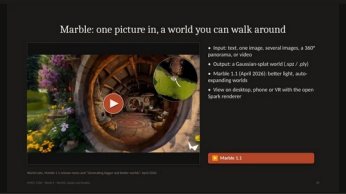
Lecture 07

Sora is gone. How does a work outlive its tool?



Lecture 08

A model "beat" real video on a sync score.



Lecture 09

What may you scan? Who owns the copy?

Tonight

All of these are one question: how do we judge the work, and what do we owe?

How top courses teach this: two different classrooms

Where	Course and material	What we borrow tonight
Harvard	Jennifer Roberts: three hours with one painting. Project Zero: See, Think, Wonder	How to look slowly (Story 1)
Stanford	d.school: I Like, I Wish, What If. CS236 Lecture 15, Stefano Ermon	How to give feedback; what a score is for
CMU	16-726 Lecture 20, Jun-Yan Zhu: Evaluating Generative Models	FID, FVD, Elo slides (Story 2)
Bradley, Hamilton	Salvaggio, Critical Topics: AI Images. ARTH-208, How to Read AI Images	Reading an image as data
NYU · MIT	DM-GY 9103 Visual AI Studio. MAS.S66 Computer Visions	Studio plus guest artists; ends in a show

Engineering classes ask “how close is it?” Art classes ask “what does it do to you?” You need both answers.

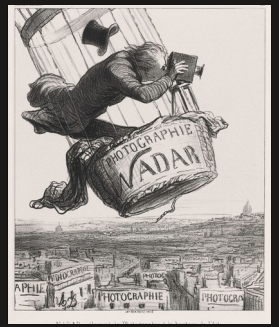
STORY 1

Looking

Before any metric, somebody has to look. Almost nobody looks for long enough.



Every new medium gets asked: is this even art?



1859

Photography

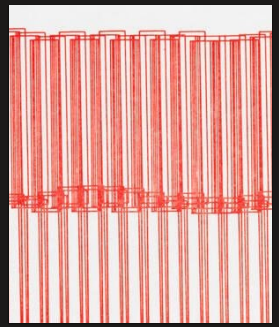
Baudelaire: the refuge of failed painters.



1917

A urinal

Duchamp's Fountain: "He CHOSE it."



1969

A plotter

Vera Molnár's Interruptions: rules, a computer, 1% of disorder.



2018

A GAN

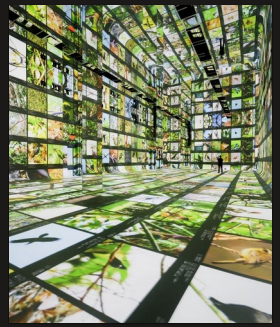
Edmond de Belamy sells at Christie's for $432,500.



2022

A prompt

Théâtre D'opéra Spatial wins at a state fair.



2026

A museum, a pope

Dataland opens. Pope Leo: "Algorithms lack the spark of the human."

Works shown for teaching and criticism. Baudelaire, Salon of 1859; The Blind Man no. 2 (1917); Christie's, Oct 2018; Vatican, 2 Oct 2026.

1859: Baudelaire hated photography. Then he sat for Nadar.



- "The refuge of every would-be painter, every painter too ill-endowed or too lazy to complete his studies"
- Photography should go back to being "the servant" of the arts and sciences
- 1862: Daumier draws Nadar in a balloon, "elevating photography to the height of art", over a city full of studio signs
- Replace "photography" with "AI" and post it today

Baudelaire, "The Modern Public and Photography", Salon of 1859 (trans. J. Mayne). Daumier, lithograph, Le Boulevard, 1862. Public domain.

1917: the first prompt engineer? “He CHOSE it.”



- A factory-made urinal, signed R. Mutt, sent to an open exhibition in New York. Not shown.
- The defence, in The Blind Man: “Whether Mr Mutt with his own hands made the fountain or not has no importance. He CHOSE it.”
- This is still the best argument for AI art
- It is also why “I chose it” is not enough: Duchamp chose once, against everyone. A prompt can choose a thousand times a day, with no risk

Alfred Stieglitz, photograph of Duchamp’s Fountain, 1917. Public domain. The Blind Man no. 2, May 1917.

A month ago: the Pope and an artist, in public

POPE LEO XIV · VATICAN · 2 OCTOBER 2026

“There is an ontological difference, even before an aesthetic one, between art and what a machine can generate.”

Speech to artists and curators: “Algorithms lack the spark of the human.”

SARP KEREM YAVUZ · THE ART NEWSPAPER · 27 OCTOBER 2026

“Language itself has become a paintbrush.”

An artist’s open reply. He cites Duchamp, Cage and Warhol, and proposes a Vatican residency for AI art.

Notice what the Pope said: even before aesthetics. If he is right, no amount of quality could ever matter.

Vatican.va, address of 2 October 2026; Hyperallergic, 5 October 2026; The Art Newspaper, 27 October 2026.

Slop: the word of 2025, and what its opposite is

’25

Merriam-Webster

“Digital content of low quality that is produced usually in quantity by means of artificial intelligence.”

Two parts

Low quality and in quantity. A painter can make bad work. Only a machine can make bad work at this speed.

The opposite

It is not “handmade”. The opposite of slop is decided: someone chose this and could tell you why.

Test: ask the maker “why this and not the other one?” Slop has no answer.

Merriam-Webster, 2025 Word of the Year.

The most useful slide tonight: four questions people mix up



1 Is it AI?

Fact. Answered by evidence: credentials, watermarks, the maker's log.



2 Is it good?

Judgment. Answered by looking and arguing. No machine can settle it.



3 Is it fair?

Ethics. Whose data, whose consent, whose job, whose energy.

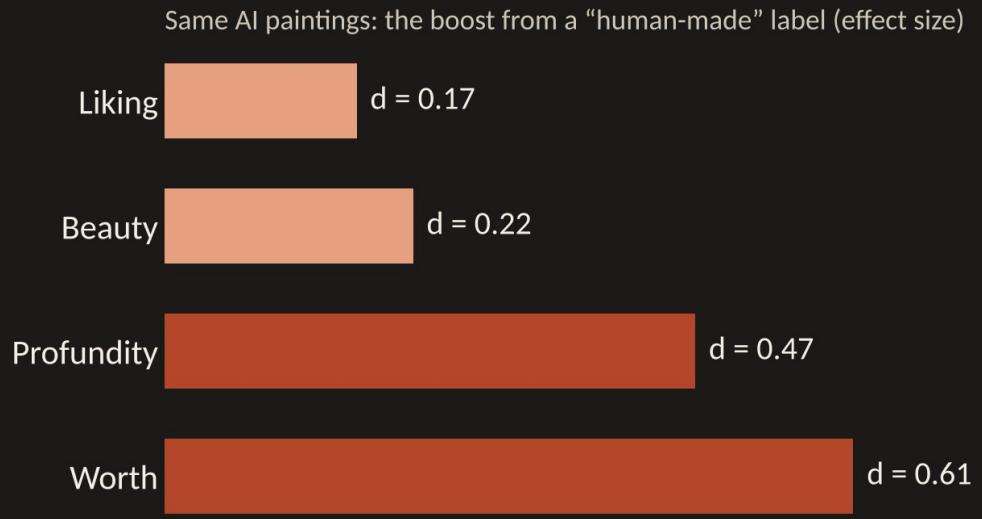


4 Is it allowed?

Law and rules. Answers differ by country and by festival.

Most online arguments about AI art answer question 3 when asked question 2. Tonight: keep them apart, then put them together.

The label changes the score. We have measured it.



- 30 paintings, all made by AI. Each randomly labelled “human” or “AI”.
- Same images, about 150 people in each study
- The gap is small for liking, large for worth and depth
- A strong story reduced the bias in Study 2: stories help. (That part is correlational.)

Bellaiche et al., “Humans versus AI: whether and why we prefer human-created compared to AI-created artwork”, Cognitive Research 8:42 (2023). Study 1, n = 149.

Harvard: three hours with one painting. What she saw, and when.



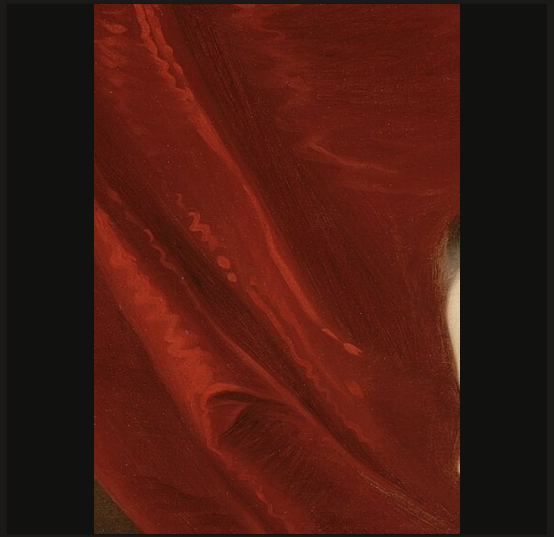
9 minutes

The boy’s ear has the same shape as the ruff on the squirrel’s belly.



21 minutes

His fingers span exactly the width of the glass below.



45 minutes

The curtain’s folds repeat the shapes of his ear and eye.

Jennifer L. Roberts, “The Power of Patience”, Harvard Magazine, Nov–Dec 2013. Copley, 1765, Museum of Fine Arts, Boston. Public domain.

SO WHAT

A generated image has no nine-minute detail, unless you put one there.

A prompt gives you an output in seconds, and the viewer gives it seconds back. Look at your own clip for three minutes. What is in there on purpose? If the answer is “nothing”, that is your next edit.

IN CLASS · 3 MINUTES · HARVARD PROJECT ZERO

See. Think. Wonder.

Look at this still for one minute in silence. Then, with your neighbour: What do you see? What do you think about that? What does it make you wonder?



Routine: Project Zero, Harvard Graduate School of Education. Still: A Face Only a Mother Could Love, Robert Gaudette, 2026.

A critic’s four steps, on a work you know: Edmond de Belamy



1 Describe

A blurred man, dark coat, white collar. Pale empty ground. A formula where a signature goes.

→



2 Analyze

The head sits high, nearly cut off. Old Master palette and brushwork, but no edge holds.

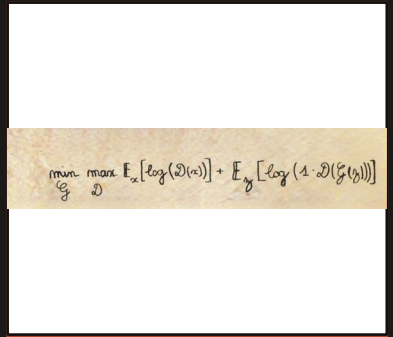
→



3 Interpret

A GAN learned from about 15,000 portraits. It paints the idea of “portrait” and cannot hold a person.

→

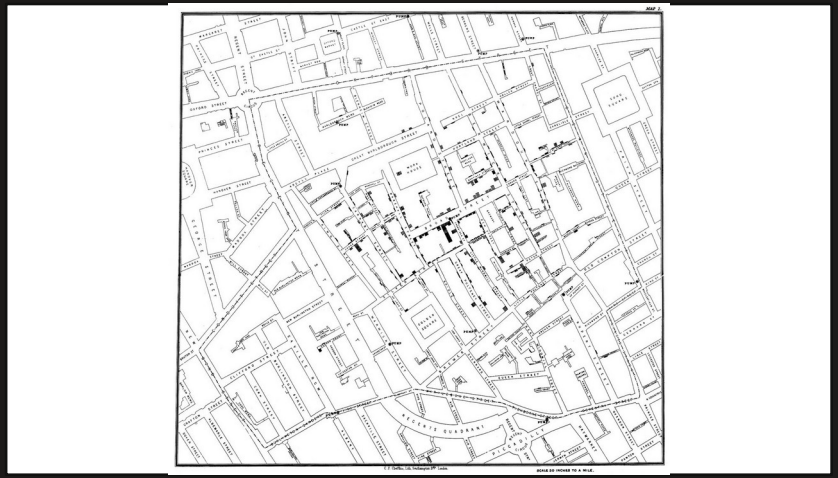


4 Judge

Interesting as an idea, dull as a picture. Worth $432,500? That judges the market.

Method: E. B. Feldman, Varieties of Visual Experience. Work: Obvious, 2018; sold at Christie’s, October 2018; dataset figure as reported by the artists.

“Every AI image is an infographic about the dataset”



John Snow, 1854

A map of cholera deaths in London. A picture you read as data.



DALL·E 2, 2022

“Bland stock photograph of two bored humans kissing.” Read it as data too.

Eryk Salvaggio, “How to Read an AI Image”, and Critical Topics: AI Images (Bradley University, 2023; recommended by Harvard metaLAB’s AI Pedagogy Project). Hamilton College ARTH-208 opens with the same definition.

How to read an AI image: four questions to add to your crit

1

What is here too often?

Golden hour, a centred face, shallow focus. That is the dataset talking.

2

What is missing?

Ask for “a family”, “a doctor”, “a Hong Kong street”. Who never shows up?

3

Where does it break?

Hands, text, reflections. Breaks show you what the model never needed to learn.

4

What did the artist fight?

Which part goes against the default? That is where the authorship lives.

Questions adapted from Salvaggio, “How to Read an AI Image”.

Leave a model alone and it drifts to twelve pictures

Image model

Stable Diffusion XL draws from a prompt

→

Vision model

LLaVA describes the picture in words

→

Back to the start

Use that description as the next prompt. Repeat 100 times.

→

The result

Whatever the prompt, it converges on 12 themes: gothic cathedrals, landscapes, sports, stormy lighthouses…

Hintze: AI is good at the first part, making, and bad at the second part, deciding what is worth keeping.

Hintze et al., “Autonomous language-image generation loops converge to generic visual motifs”, Patterns, December 2025. 100 prompts; 4 image models and 4 description models tested.

Useful: which crit method for which moment?

Method	From	Steps	Use it when
See, Think, Wonder	Harvard Project Zero	See → think → wonder	You meet a new work
Four steps	Feldman	Describe → analyze → interpret → judge	You write about a work
I Like, I Wish, What If	Stanford d.school	Praise → wish → new idea	A classmate's draft
Critical Response Process	Liz Lerman	Meaning → artist asks → neutral questions → opinions, with permission	Your final presentation

In two weeks we use the last two: you ask first, then we respond. "I wish" is not an insult. It comes with a "what if".

Lerman & Borstel, Critical Response Process (2003). Stanford d.school method "I Like, I Wish, What If".

DISCUSSION · 2 MINUTES

If the label can change your number, was your number ever about the work?

Then: should a jury be told how a work was made before they judge it, or after?

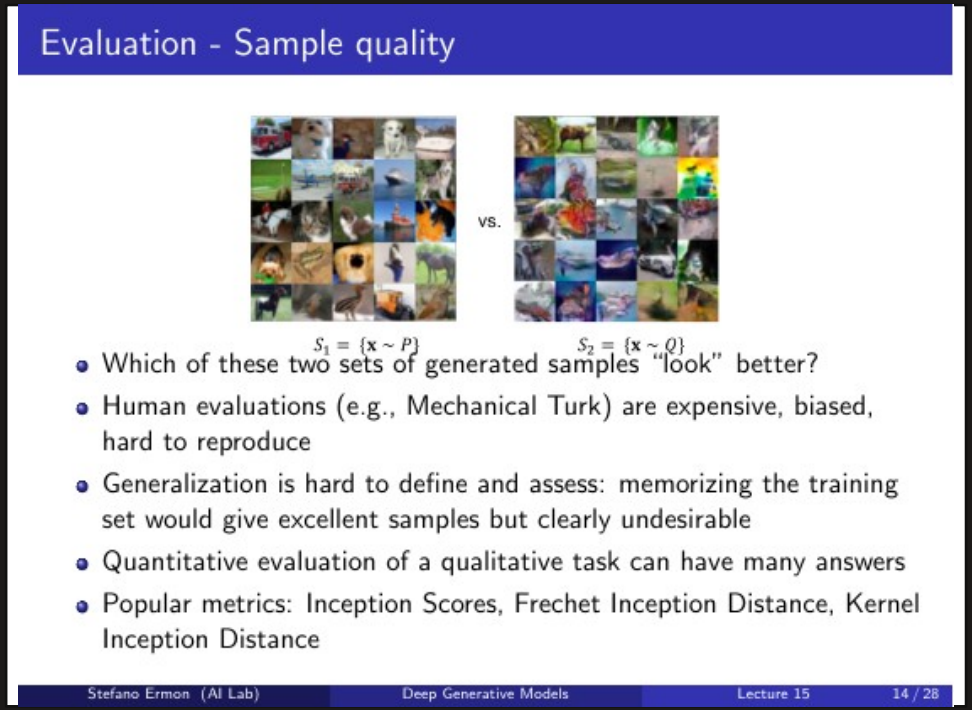
STORY 2 · THE TECHNICAL PART

Measuring

What a score can see, what it cannot, and how a score got inside the models you use.



Stanford's first question: what is the task you care about?



FROM STANFORD CS236

- "In any research field, evaluation drives progress"
- Generative models have no right answer to check against
- People are the gold standard, but slow, biased and hard to repeat
- "Memorizing the training set would give excellent samples"

Stefano Ermon, Stanford CS236 "Deep Generative Models", Lecture 15 "Evaluating Generative Models" (Fall 2023), shown with credit.

Three ways to score generated video

1

Compare to the real

Pixels (PSNR, SSIM) or features (LPIPS, FID, FVD). “How close is it?”

2

Ask a model

CLIPScore, TIFA, VBench. Use another AI to grade: “Is the horse on the grass?”

3

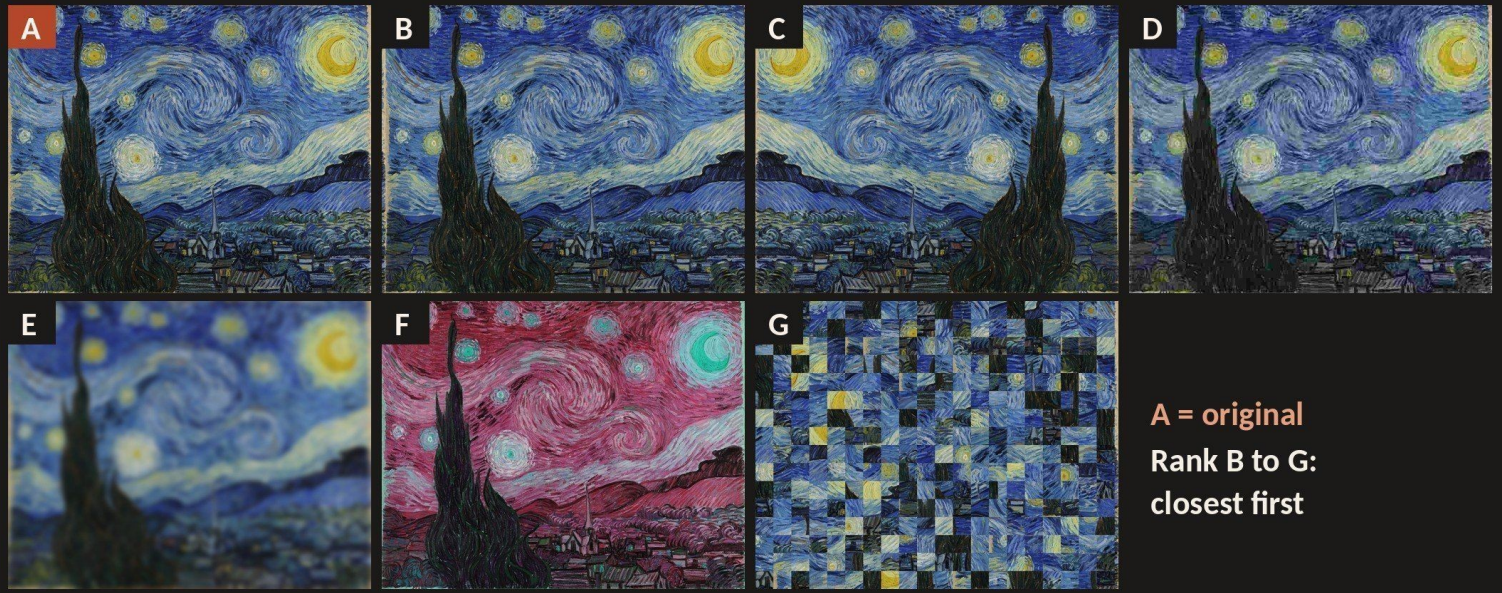
Ask people

A/B votes and Elo rankings. “Which do you prefer?”

Each one answers a smaller question than “is it good?” Let’s try them.

Structure follows Jun-Yan Zhu, CMU 16-726 Lecture 20, and Huang et al., VBench (CVPR 2024).

Game: be the metric. Rank B to G, closest to A first.



A = original

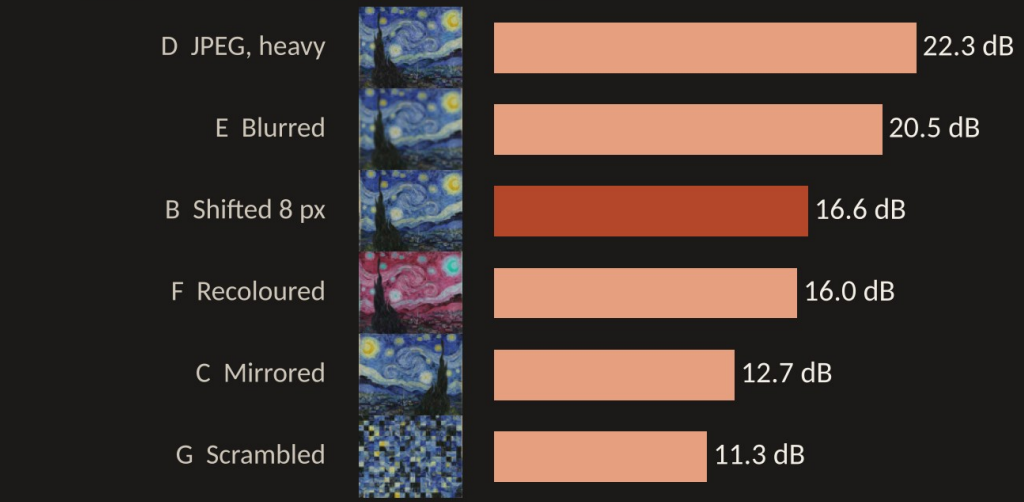
Rank B to G: closest first

Vote now: which version is closest to Van Gogh's original? Which is furthest?

Vincent van Gogh, The Starry Night, 1889. Public domain. Variants made for this class.

What pixels say: moving 8 pixels is worse than wrecking it

PSNR against the original (dB). Higher means “closer”.

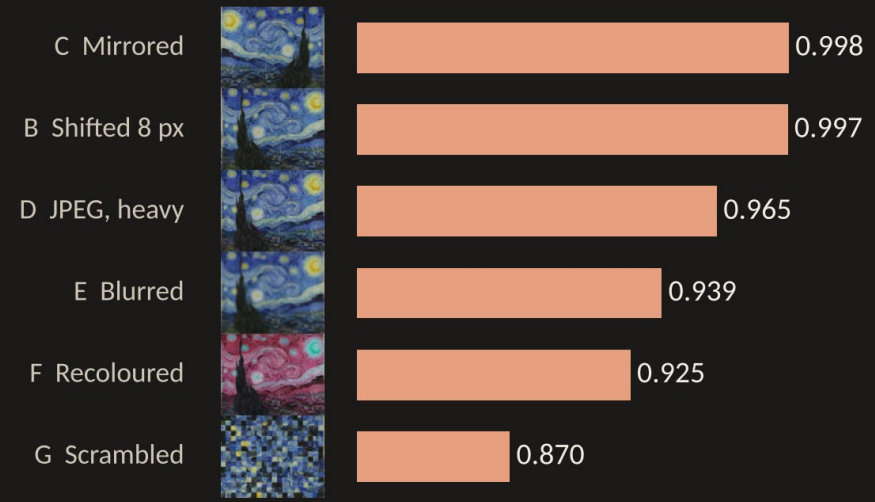


- PSNR compares each pixel with the same pixel in the original
- D and E look damaged to you. B looks perfect.
- PSNR ranks D and E above B
- SSIM agrees: B 0.11, heavy JPEG 0.57
- Your eyes do not work like this

Measured for this class, 3 Nov 2026 (768 × 608 px). PSNR = $10 \log_{10}(255^2 / \text{mean squared pixel error})$.

Features are smarter. A network still sees a lot of “same”.

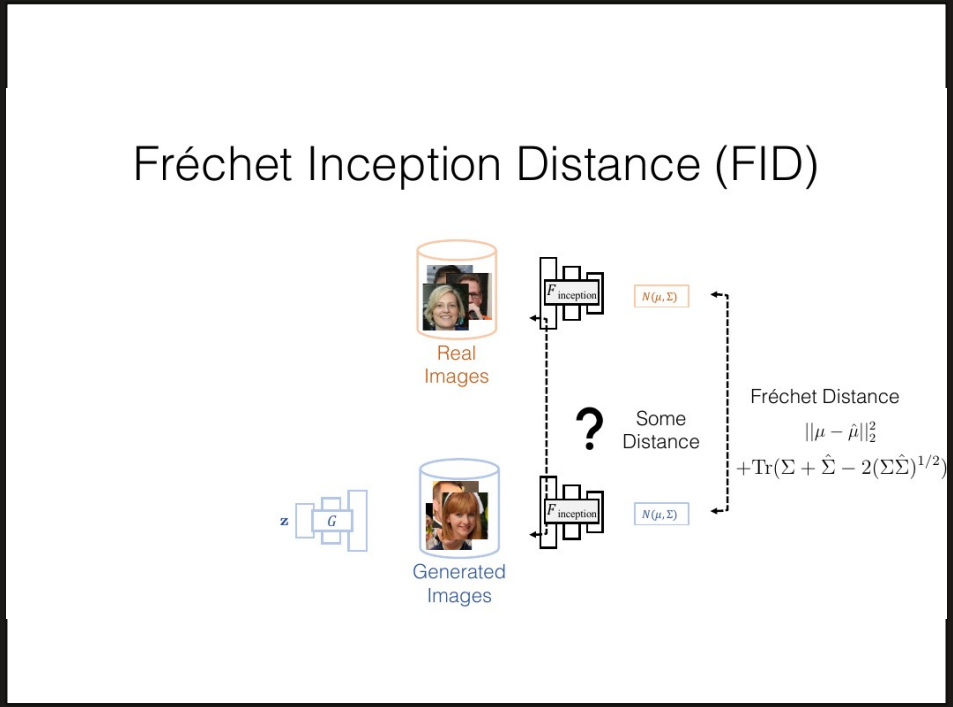
CLIP similarity to the original. 1.0 means “same”.



- Now compare what a network sees (CLIP), not pixels
- Shifted and mirrored: nearly identical, 0.997 and 0.998. Much more like us
- Blur and recolouring lose more than mirroring
- The scrambled one still gets 0.870: right colours, right texture, no painting
- A mirror image means something different to a painter. Not here.

Measured for this class, 3 Nov 2026, using CLIP ViT-L/14 image embeddings (cosine similarity).

Under the hood: FID, the number in every paper

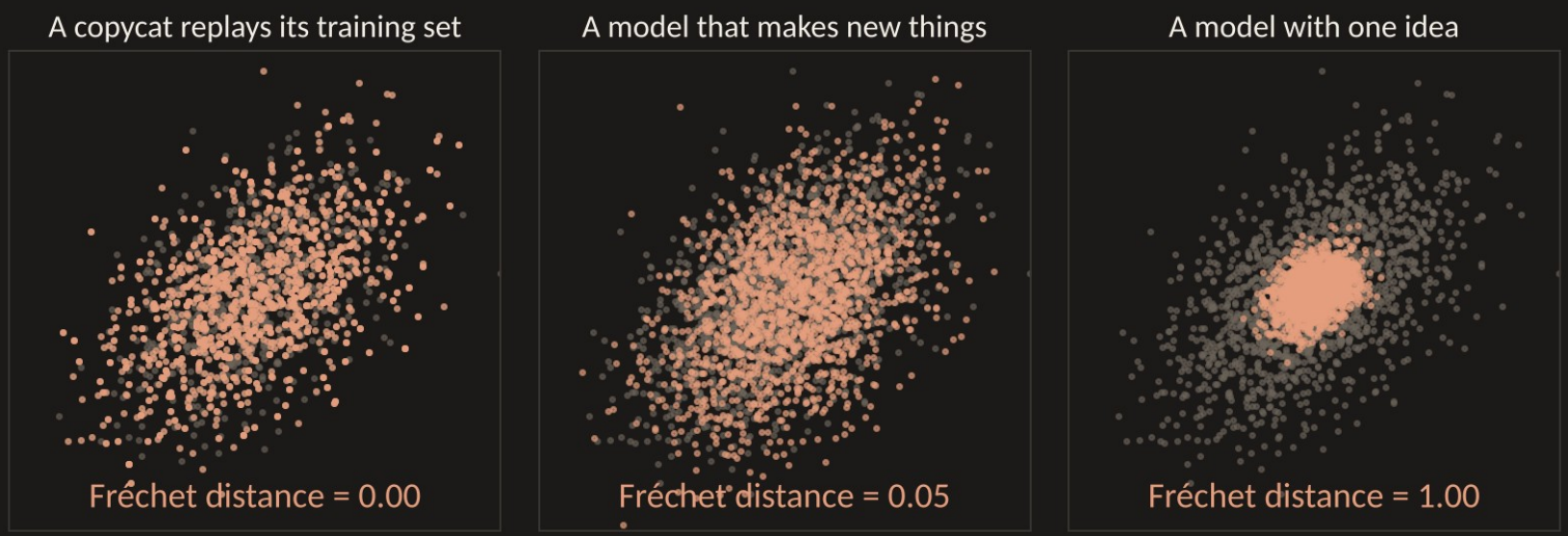


IN ONE BREATH

- Pass many real images through a network: you get a cloud of points
- Do the same with many generated images
- Fit a simple blob (a Gaussian) to each cloud
- FID = how far apart the two blobs are
- Lower is better. It never looks at one single image.

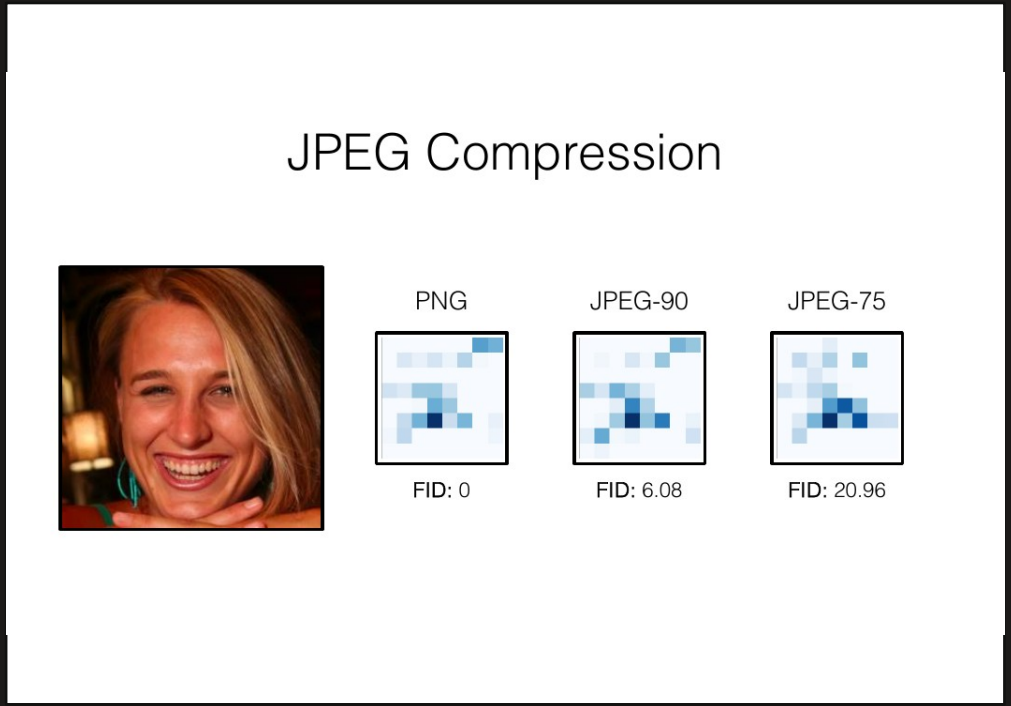
Slide from Jun-Yan Zhu, CMU 16-726, Lecture 20 “Evaluating Generative Models” (Spring 2025), shown with credit.

Worked example: the copycat gets a perfect score



Toy example in 2D, computed for this class with the Fréchet formula. Grey = real, orange = generated. Real FID uses about 2,048 dimensions and 10,000+ images.

CMU: the same photo, three FIDs. Nothing visible changed.

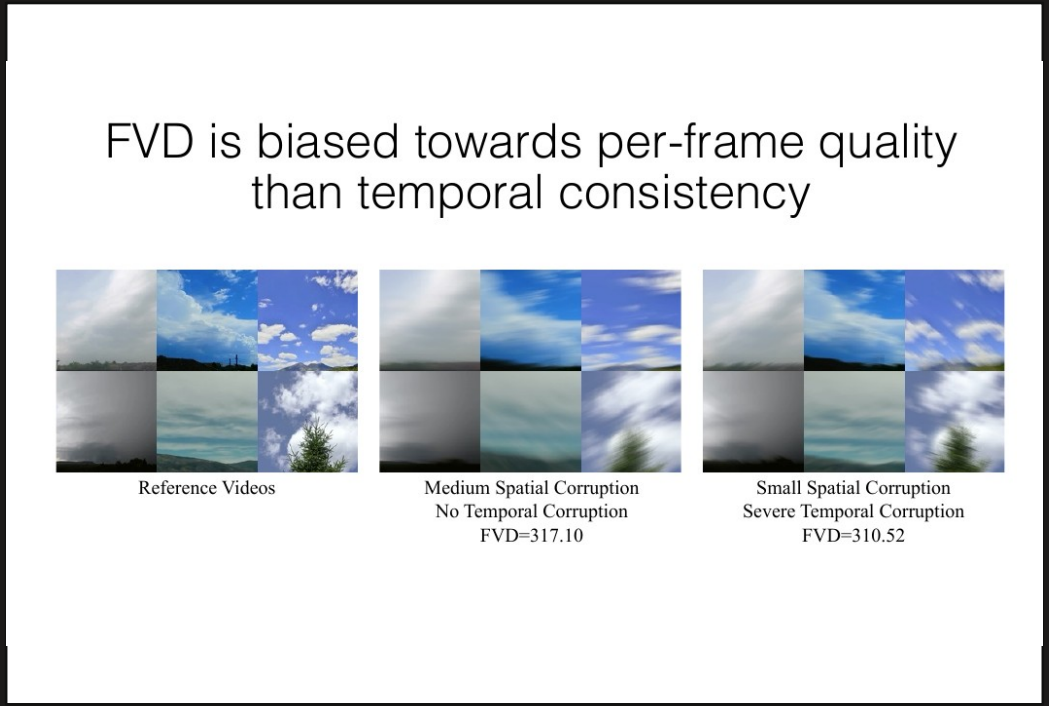


FROM CMU 16-726

- PNG → JPEG quality 90: FID 6.08
- JPEG quality 75: FID 20.96
- Which resize filter you use moves it too: 2.68 to 2.99
- Papers celebrate gains smaller than that
- Zhu: use careful implementations, several protocols, and test it on the real task

Slide from Jun-Yan Zhu, CMU 16-726, Lecture 20 “Evaluating Generative Models” (Spring 2025), shown with credit.

Video makes it worse: a broken clip beats a clean one

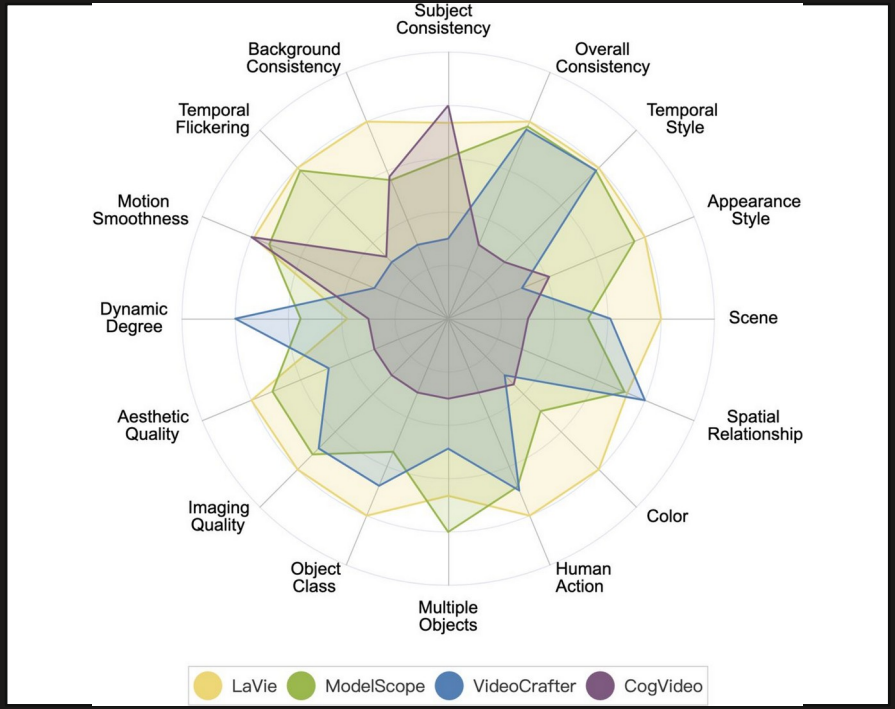


FROM CMU 16-726

- FVD is FID for video
- Middle clip: frames look a bit off, motion is fine. FVD 317
- Right clip: frames look good, motion is badly broken. FVD 311: “better”
- It mostly judges frames, not time
- Time is what makes it a film. Same trap as the lip-sync score in Lecture 08.

Slide from Jun-Yan Zhu, CMU 16-726, Lecture 20 “Evaluating Generative Models” (Spring 2025), shown with credit. Ge et al., “On the Content Bias in Fréchet Video Distance”, CVPR 2024.

VBench: stop giving one number. Give sixteen.

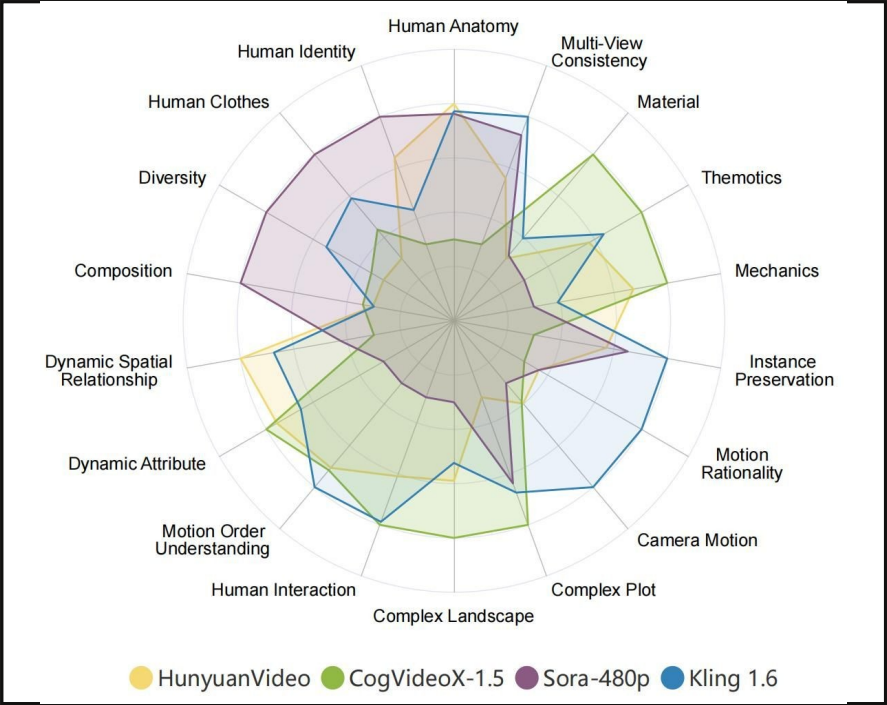


- Splits “video quality” into 16 dimensions: flicker, motion, identity, colour, scene…
- About 100 prompts per dimension
- Checked against human preference for each one
- You can now say what a model is bad at
- A profile is more honest than a rank

↗ VBench project page

Huang et al., VBench: Comprehensive Benchmark Suite for Video Generative Models, CVPR 2024. Figure from the project page.

VBench-2.0: can you score creativity?

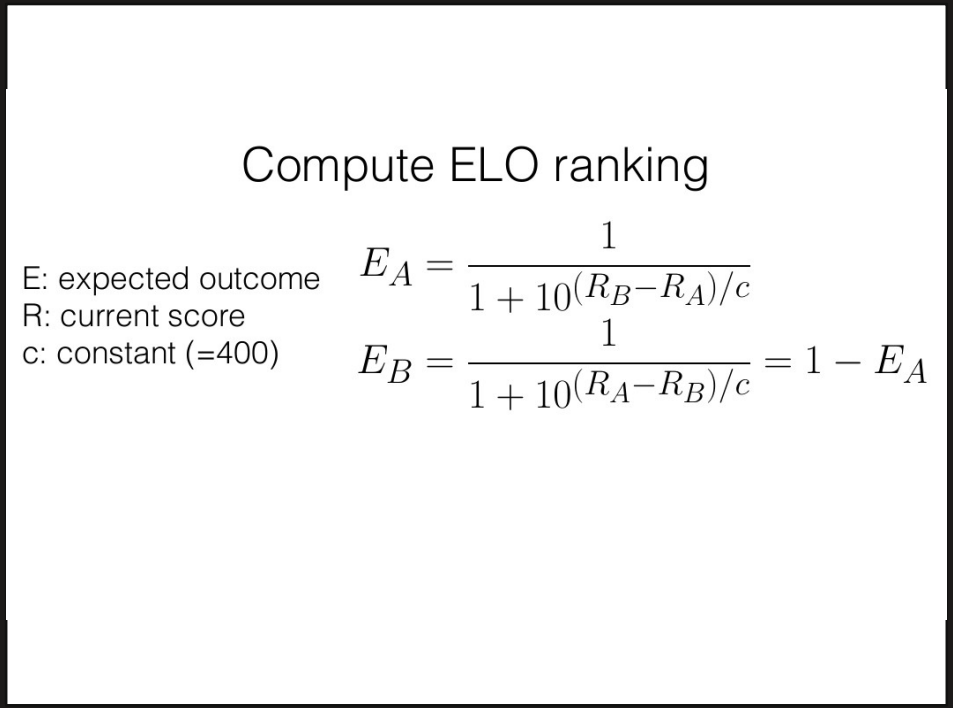


- Asks if the video is really faithful, not just plausible
- Five dimensions: Human Fidelity, Controllability, Creativity, Physics, Commonsense
- Uses vision-language models as the graders
- “Creativity” here means diversity and composition
- Would Duchamp pass the Commonsense test?

↗ VBench-2.0 project page

Huang et al., VBench-2.0 (2025). Figure from the project page.

Asking people: the Elo ranking, from chess to video

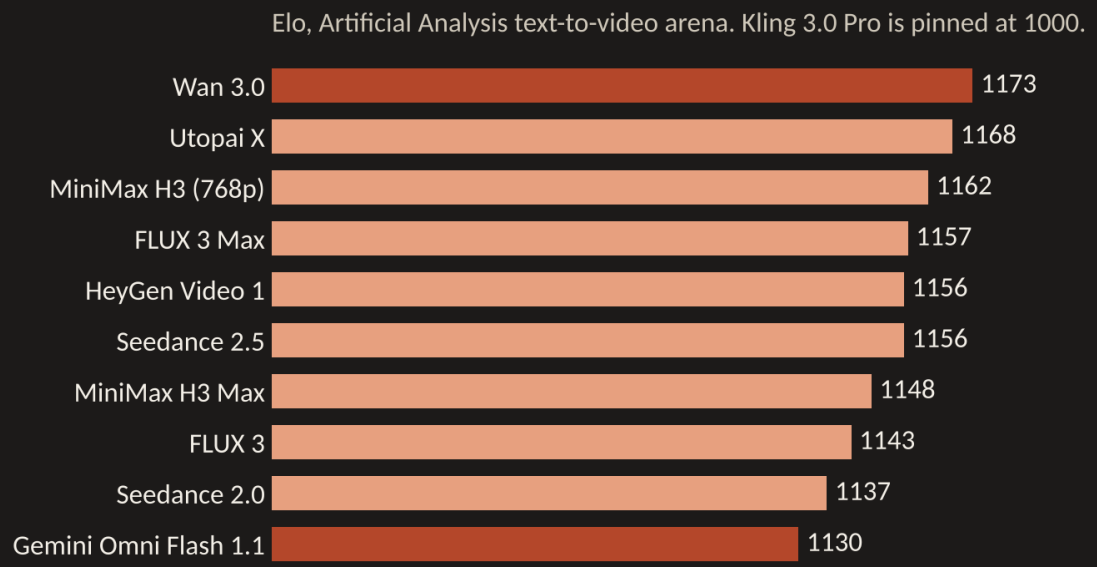


WORKED EXAMPLE

- Show two videos from one prompt. Blind. Pick one.
- Winner gains points, loser loses them
- Expected win = 1 / (1 + 10^(−gap/400))
- A gap of 100 Elo: wins 64% of votes
- A gap of 43 Elo: wins 56%

Slide from Jun-Yan Zhu, CMU 16-726, Lecture 20 “Evaluating Generative Models” (Spring 2025), shown with credit. Numbers computed from the formula.

This week’s top 10: first and tenth are 43 points apart



- Blind votes by validated evaluators
- First beats tenth about 56% of the time
- The top four are four different labs, within 16 points
- Next week it will change
- So don’t pick your tool by rank alone. Try it on your own shot.

Artificial Analysis, Text-to-Video leaderboard (AA-Video-T2V v2.1), read 3 Nov 2026. Win rate computed from the Elo formula.

What does a blind A/B vote reward?

✓

It rewards

The first few seconds. Sharpness, glossy light, spectacle. The prompt's most obvious reading.

×

It cannot see

A slow build, an ending, a joke that lands late. Anything that needs context, or your second viewing.

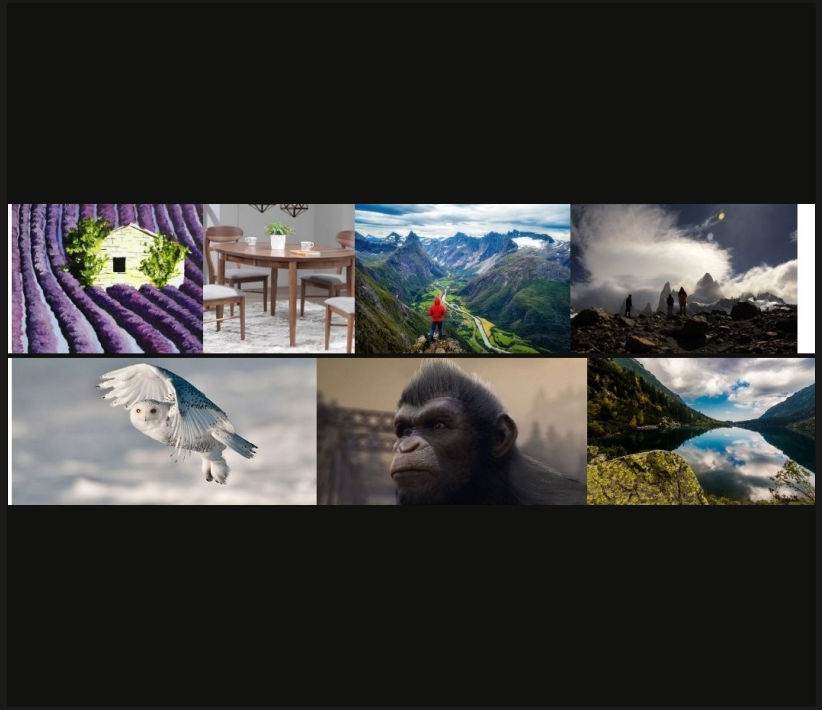
→

From our lab

PhysHPO (NeurIPS 2025): teach preference at four levels, from the whole clip down to motion. What you reward is what you get.

Chen, Huang, Chen, Yang & Lim, "Hierarchical Fine-grained Preference Optimization for Physically Plausible Video Generation", NeurIPS 2025 (arXiv 2508.10858).

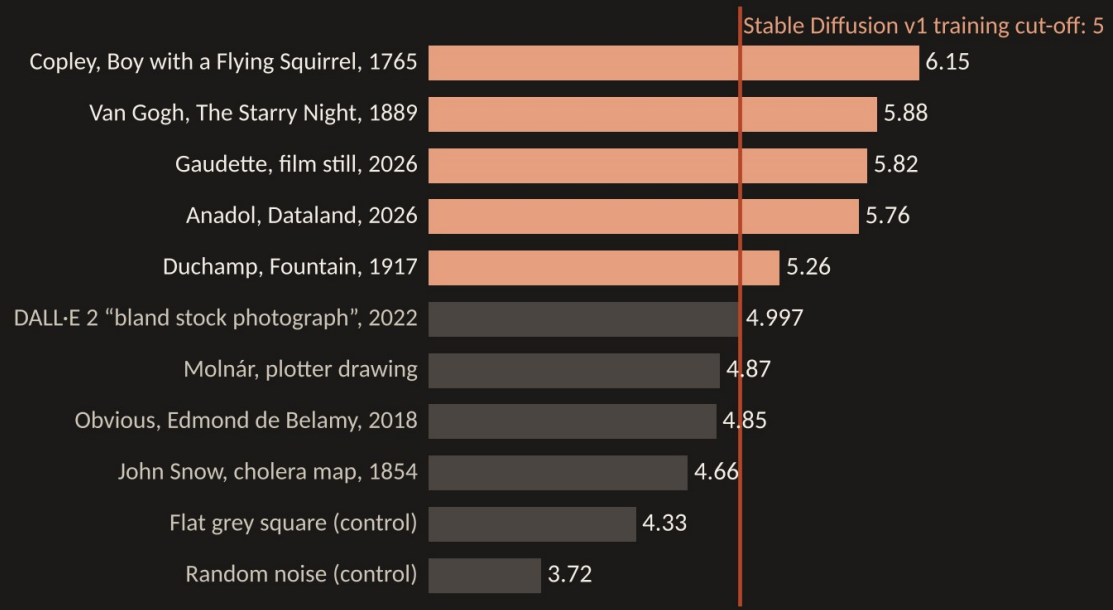
How “taste” got into Stable Diffusion



- People rate images: “How much do you like this, 1 to 10?” Including 250,000 photos from DPChallenge, a photo contest site
- A tiny linear model on CLIP learns to predict the rating
- Score LAION-5B. 600 million images score 5 or more
- Stable Diffusion v1 trains on that 5+ subset
- They picked the linear model partly because its results looked “most visually appealing”. Taste, all the way down.

LAION, “LAION-Aesthetics” (blog). Ratings from SAC (176k), LAION-Logos (15k), AVA / dpchallenge.com (~250k).

We ran that predictor on art history this afternoon



- Copley and Van Gogh do well
- Duchamp passes, barely
- A “bland stock photograph” lands right on the line, above Vera Molnár
- Molnár, Belamy and Snow’s map fall below the cut-off
- Noise and flat grey still get 3.7 and 4.3 out of 10

Our run, 3 Nov 2026: LAION improved aesthetic predictor (sac+logos+ava1, ViT-L/14) on one reproduction of each work. A demonstration, not a study.

And the score prefers my pink Van Gogh



The Starry Night · 5.88

Van Gogh, 1889.



My 20-second recolour · 6.15

Same painting, hue rotated. It beats the original.

Our run, 3 Nov 2026, same predictor. A blurred version scores 4.86, so the predictor is not random. It just isn't Van Gogh's audience.

The loop: why everything starts to look the same

People's ratings

A photo contest, a click, a blind vote

→

A score

Aesthetic predictor, Elo, reward

→

The model

Trained or tuned towards the score

→

The feed

New images people then see, rate, and copy

Goodhart's law: when a measure becomes a target, it stops being a good measure. Hintze's twelve pictures are what the end of this loop looks like.

Goodhart (1975), phrasing after M. Strathern (1997). Hintze et al., Patterns (2025).

Useful: reading a leaderboard or a press release

1 **Which task?**

General prompts, or your kind of shot?

2 **Who graded?**

People, a model, or the company itself?

3 **How big is the gap?**

43 Elo is 56%. Is 6.8 to 6.75 real?

4 **What about time?**

Does the metric see motion and endings?

5 **Memorization?**

Would a copycat score well on this?

6 **Your own test**

Your three hardest shots. Three models. Your eyes.

DISCUSSION · 1 MINUTE

You generated 100 takes. Would you let a score pick the top ten for you to look at?

What would you lose? What would you save? Tell your neighbour, then we take a break.

Break: student presentations

Presentations

This week’s sign-ups, about 10 minutes each. Try I Like, I Wish, What If on each one.

10-minute break

Then Story 3: what happens when the work leaves your laptop.

Try it

Run one of your clips past a neighbour with See, Think, Wonder.

STORY 3

Showing

A work becomes art in public: a wall, a screen, a jury, a crowd, a letter of complaint.



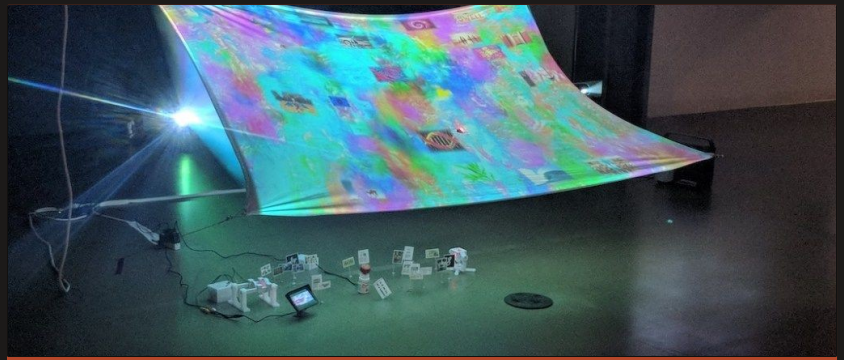
Installation view, Machine Dreams: Rainforest, DATALAND, Los Angeles. Refik Anadol Studio, via NPR.

First, two kinds of work that often get mixed up



Art made with AI

The model is the brush. Refik Anadol, Dataland: you judge the experience.



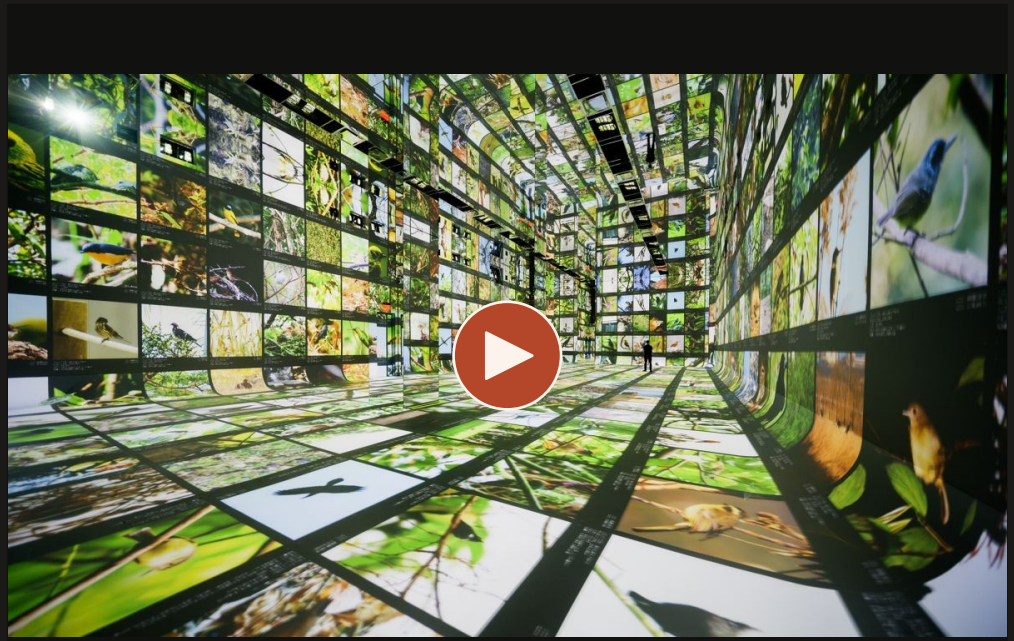
Art about AI

The model is the subject. Schirn Frankfurt, “The World Through AI”, this summer: Steyerl, Paglen, Crawford & Joler.

Many strong works are both. Ask which one you are making. It changes what the audience needs to know.

Schirn Kunsthalle Frankfurt, 11 June – 20 Sept 2026 (about 40 works by about 30 artists). Image right: Post Generation, tiat, San Francisco, ARTnews, Oct 2026.

Dataland: “the world’s first museum of AI arts”



- Opened 20 June 2026, in a Gehry building in downtown Los Angeles
- 25,000 sq ft, five galleries. “Machine Dreams: Rainforest”, to 31 Jan 2027
- A custom Large Nature Model; data from museums and the Amazon
- Wristband reads your body, the room responds. Sound, smell, even taste

▶️ Watch: inside Dataland

Artsy, 22 June 2026; NPR, 29 July 2026. Installation view: Refik Anadol Studio. Video: Revista ISP (Spanish). (“World’s first” is the museum’s own claim.)

Read the critics: which question are they answering?

ANN HIRSCH · ARTNET

“A screensaver on steroids that feels so real you could live inside it.”

Means it as praise. “The data is the paint.”

LAURA HERTZFELD · THE ART NEWSPAPER

“A sense of joy”, lost in many museums’ tech experiments.

About the experience.

R. DANIEL FOSTER · FORBES

“An entertainment complex designed to astonish.”

Finds the orchestral music “overwrought”.

Jerry Saltz called Anadol’s earlier MoMA work a kind of “lava lamp”. Is “astonishing” a compliment for a museum? Is “entertainment” an insult?

As quoted in The Week, 1 July 2026, and Artnet, June 2026.

Museums make claims too. Which would you check?

Dataland says	How you could test it	Which question?
Data is “permission-based”: Smithsonian, Natural History Museum, Cornell	Ask for the list. Check with one partner.	Fair?
Runs on a low-CO_2 Google data centre in Oregon, “87% carbon-free”	Whose number? Does it include training?	Fair?
Each visit uses about one iPhone charge	Divide the building’s power by visitors. Include the screens.	Fair?
“World’s first museum of AI arts”	Define “museum”. Define “AI arts”.	Allowed?

Credit where due: Anadol names his data sources and addresses energy. Most artists don’t. Now hold everyone to the same test.

Claims as reported by Artsy (22 June 2026), which notes they “will likely be closely watched”. We have not verified them.

Madison, 18 September: a museum, Beeple, and a curtain



- Madison Museum of Contemporary Art shows Diffuse Control: 12 synchronized screens, by Beeple
- Visitors and curators use phones and a panel to transform works from the museum's own collection, with a diffusion model
- The director: "It is a sculpture that moves."
- 900+ people sign an open letter against it, led by a local artist

▶️ Watch: Diffuse Control

Wisconsin Public Radio, 25 Sept 2026. Photo: Angela Major / WPR. Video: Beeple, on YouTube; also on the museum's page.

Two sentences worth arguing about

THE OPEN LETTER · 900+ SIGNERS

No explicit consent from artists whose work went in. And diffusion models are trained on art scraped without consent.

Words from signers: “disappointing”, “disgusting”, “poor taste”.

PAUL BAKER PRINDLE · MUSEUM DIRECTOR

“One can listen and hear, but also still not agree.”

And: “it’s incredibly dangerous to create blanket policies, around artists especially.”

Hint: the letter makes two different complaints. The museum answered only one of them.

Wisconsin Public Radio, 25 Sept 2026.

Two layers of consent, and the museum answered one



Layer 1: the collection

The works on screen. The museum says it got consent where law required it; older works are public domain. Answered.



Layer 2: the model

The billions of images behind any diffusion model. Nobody in Madison can ask those artists. Not answered, and not answerable by one museum.

Photo: Angela Major / WPR. Layer 2 image: LAION-Aesthetics blog. Director's position as reported by WPR.

Two weeks ago at the V&A: Vera Molnár



- “Degrees of Disruption: Vera Molnar and Generative Art”, opened 16 October, Rooms 88a and 90
- Over 50 works, with Casey Reas, Licia He and others. Free, until 30 May 2027
- Molnár (1924–2023) drew with programs and plotters from 1968
- Her rule of thumb: “1% of disorder”

▶️ Watch: Molnár interview, 2017

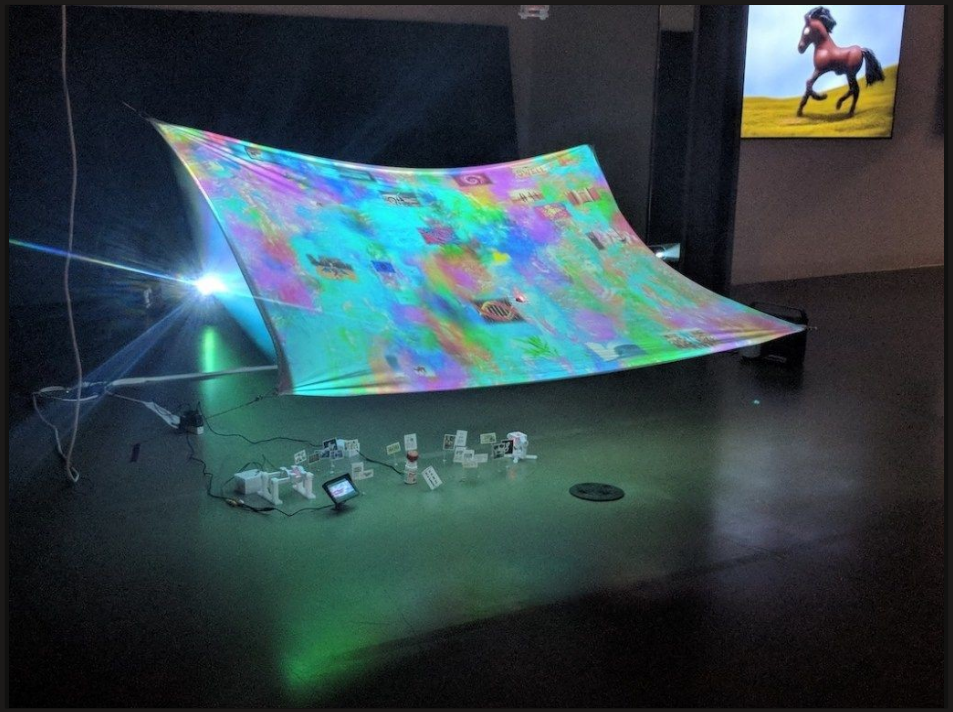
V&A, South Kensington; opening date from art-magazine.ai listings. Image: V&A website. Video: Studio International, 2017. Shown for teaching and criticism.

Same word, “generative”. Different decisions.

	Molnár, 1969	Diffusion, 2026
The rule	She writes it	Learned from billions of images
Randomness	1%, chosen and tuned	Noise is where everything starts
What she can explain	Every line, in principle	Nearly nothing; ask the dataset
Where the default is	She has none yet: nobody has done this	Strong: twelve pictures, golden hour
Where you can fight	The next rule	Data, prompts, seeds, edits, what you delete

Her art was the design of constraints. Yours can be too. Tell us yours: it is a very good first line for your final presentation.

Last month: artists adopt a dead model



- “Post Generation”, tiat gallery, San Francisco. Curated by Tina Tarighian of Google Creative Lab
- Veo 1 is gone, and nobody can generate with it. She “gifted” its leftover archive to three artists
- Haley Mortin knits Veo 1’s garbled text as 10 embroidery samplers. She used to work as a data annotator.
- Karyn Nakamura’s Labor of Light projects it onto cloth, over printed research papers

↗ ARTnews, 12 Oct 2026

Shanti Escalante-De Mattei, “In Search of the Future, Artists Give New Life to Dead AI Models”, ARTnews, 12 Oct 2026. Photo: ARTnews.

Film, 2026: the gates went up, and an AI short walked through another door

OUT

9 Apr

Cannes

AI-driven films out of competition. “We refuse to let AI dictate the law.”

5,500

Apr

WAiFF, Cannes

Entries from 80+ countries, in the same town, the same month.

HUMAN

2 May

The Oscars

Performers “demonstrably performed by humans”. Screenplays “human-authored”.



June

Runway AIF

A Face Only a Mother Could Love wins the Grand Prix.



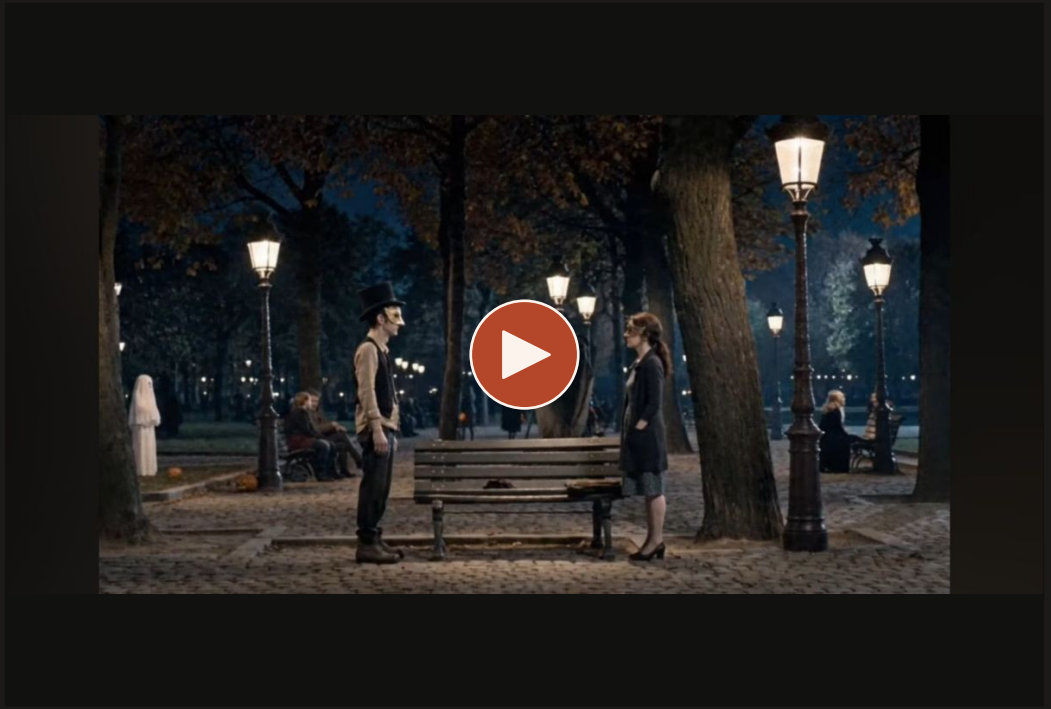
6 Sep

Venice

The same film wins the Reply AI Film Festival, jury chaired by Gabriele Salvatores.

Agerpres, 9 Apr 2026; HackerNoon on WAiFF; TechCrunch, 2 May 2026; aif.runway.com; Reply press release, 7 Sept 2026 (held alongside, not part of, the Venice Film Festival).

A Face Only a Mother Could Love



- Robert Gaudette, 7:50. No actor, no crew
- Marcel, a Parisian man with a facial disfigurement, dances alone in his room, moves through Paris with complete confidence
- Grok, Nano Banana, Seedance
- Hollywood Reporter: “cinema’s great hope”, or “its greatest threat”

▶️ Watch the film (7:50)

aif.runway.com; Reply press release, 7 Sept 2026; Steven Zeitchik, The Hollywood Reporter, 17 June 2026. Still from the film.

Live crit: watch 2 minutes, then four steps

1 **Describe**

Only what is on screen. Shots, faces, sound. No opinions.

2 **Analyze**

How is it cut? Where is the camera? What repeats? Where does time pass?

3 **Interpret**

What is it about? A film with no actors, about being looked at. Is that an accident?

4 **Judge, last**

Then use the AI questions: what is the default here? What did he fight?

One volunteer for each step. If you start with "it's just AI", you go back to step 1.

▶ Play the film

Useful: write the wall text for your own piece

```
Morning Tram, 2026
Your Name
24 s. AI-generated video, sound, edit.

The tram is the last place in the city
where strangers look at each other.

Rule: no shot was kept that the model
offered first. No face is anyone real.

Seedance 2.5. My own photos of Central
as references. See credits for the rest.
```

- Tombstone: title, name, year, length, medium
- One idea: what we should feel or notice, no adjectives
- One constraint: what you refused to let the model do
- One honest line: models, data, references, who agreed
- Four lines, 60 words. In a gallery, this is often all people read

Example invented for this class.

Go and see some: open now or soon

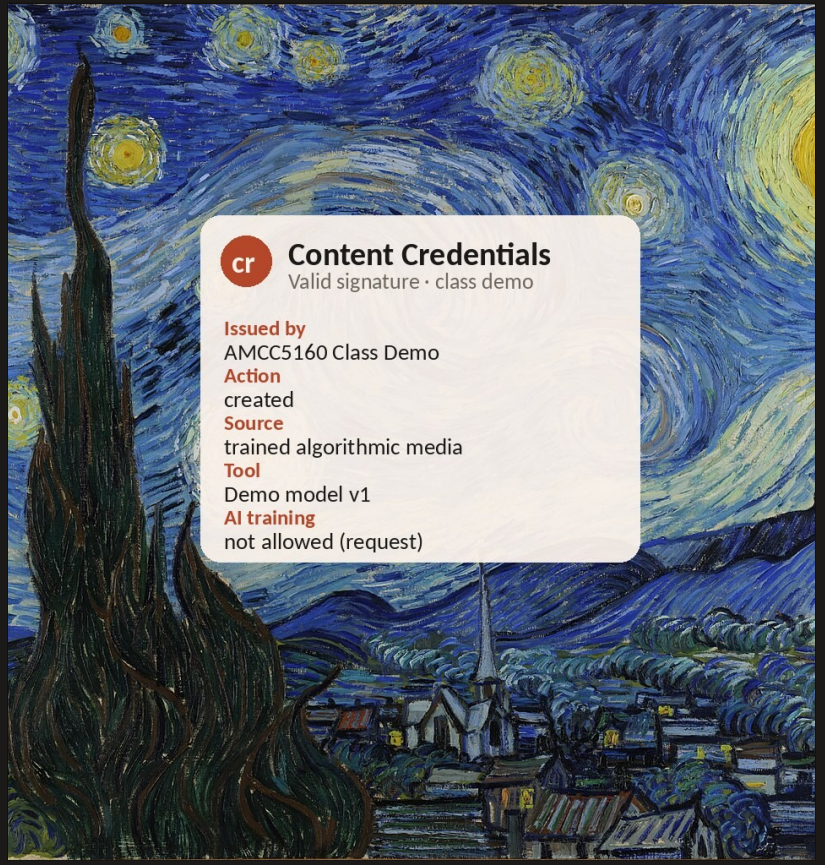
Show	Where	When
Degrees of Disruption: Vera Molnar	V&A, London · free	to 30 May 2027
Machine Dreams: Rainforest	Dataland, Los Angeles	to 31 Jan 2027
Paris Photo: Digital Sector	Grand Palais, Paris	12–15 Nov
artport: A History of Internet Art	Whitney, New York	from 21 Nov
Emi Kusano: End of Nostalgia	Hyper Museum Hanno, Japan	14 Nov – 31 Jan
SURREALITY MR × AI, from our own university	HKUST(GZ), then Hong Kong	check for return dates

Listings: art-magazine.ai, read 3 Nov 2026; HKUST press release, 16 June 2026. Please check each venue's website before you travel.

STORY 4

Signing

What do you owe your audience? And what can the technology actually prove?



Our signed demo of Van Gogh's The Starry Night; the card shows what its manifest says.

Last month: a science video prize taken back

Mid-Sept: winner

Nikon's Small World in Motion: a beautiful video of cilia in lung tissue, in red, blue and purple.

→

Late Sept: eyes

Microscopists online: those purple shapes look like mitochondria the size of a nucleus. That does not happen.

→

Then: a watermark

A researcher finds a SynthID watermark in the video. The maker: AI only coloured real footage.

→

9 Oct: withdrawn

Nikon disqualifies the entry and says it will revisit its rules. A new winner is named.

Experts' eyes first. The watermark second. The rule third. All three were needed, and all three questions were different.

Gizmodo, 2 Oct 2026; Newser, 9 Oct 2026; PetaPixel, 1 Oct 2026. The entrant says he believed he stayed within the guidelines.

Under the hood: three layers, three different promises

1

A label you can see

"AI-generated", a platform tag, EU icon, end credits. Promise: someone told you. Easy to crop or skip.

2

Signed metadata: C2PA

A signed record inside the file: who, what tool, what edits. Promise: this exact file has not changed since.

3

Pixel watermark: SynthID

A hidden pattern in the pixels or frames. Promise: this came from a model that marks. Tries to survive copying.

OpenAI, Google and others now add both 2 and 3. YouTube has auto-labelled AI video since May. Each layer covers another's weakness.

c2paviewer.com, May 2026 (OpenAI 19 May; YouTube 27 May; Google I/O). Google reports 100+ billion items marked with SynthID.

Under the hood: C2PA in four steps

1 Hash

Boil the bytes down to a fingerprint. Ours: aa4d227e… Flip one bit of 200,000 bytes: f2301eef…

→

2 Claim

Write down the facts: “created”, “made by a trained model”, “do not use for training”, plus the hash.

→

3 Sign

Sign with a private key. Anyone with your certificate can check it was you.

→

4 Embed

Tuck the manifest into the JPEG, MP4 or PNG. It travels with the file. Until it doesn’t.

Notice what it does not say: nothing about whether the claim is true, or whether the picture is any good.

C2PA Technical Specification; c2pa.org. Same public-key idea as the padlock in your browser.

See it: the real manifest we signed this afternoon


```
{
  "title": "Starry Night (class demo)",
  "claim_generator_info": [{ "name": "AMCC5160 class demo" }],
  "assertions": [
    { "label": "c2pa.actions.v2",
      "data": { "actions": [{
        "action": "c2pa.created",
        "softwareAgent": { "name": "Demo model v1" },
        "digitalSourceType":
          ".../digitalsourcetype/trainedAlgorithmicMedia"
      }] } },
    { "label": "c2pa.training-mining",
      "data": { "entries": {
        "c2pa.ai_generative_training": { "use": "notAllowed" }
      } } }
  ],
  "signature_info": {
    "alg": "Es256",
    "issuer": "AMCC5160 Class Demo",
    "common_name": "Harry Yang class demo"
  }
}
```


- We signed Starry Night with a demo certificate
- Says: created by a model. Says: do not train on me
- “do not train” is only a request. Nothing enforces it
- Our reader reports “signingCredential.untrusted”: the signature is fine, but no one has agreed to trust me as a signer

Our run, 3 Nov 2026, using c2pa-python 0.38. Output shortened.

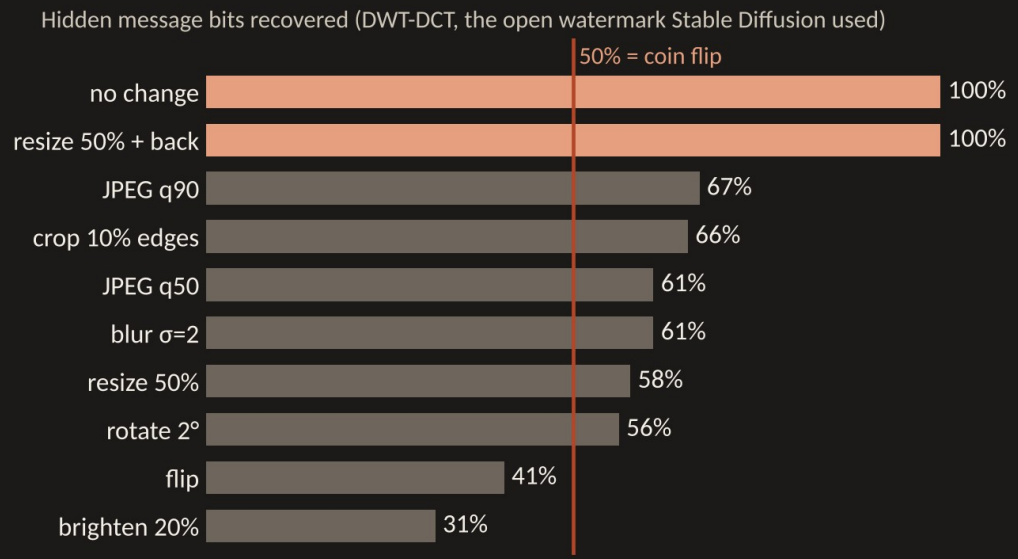
We broke it four ways, in Python, in five minutes

What we did	Reader says	What it means
Signed file	Valid. dataHash match	Unchanged since signing
Re-save as JPEG	No manifest found	Gone. No warning at all
Screenshot (PNG)	No manifest found	Gone. This is what most sharing does
Resize for upload	No manifest found	Gone
Edit pixels, keep manifest	Invalid. dataHash mismatch	Caught! Tampering shows

So: a credential proves a lot when it is there, and absence proves nothing. "No credentials" does not mean fake. It means nearly everything.

Our run, 3 Nov 2026 (c2pa-python 0.38; res.json in the lecture materials). Platforms may keep or re-sign credentials on their own.

Under the hood: the watermark. A hidden message, tested.



- Hide a message in the image's frequencies, where eyes are weak
- We tried DWT-DCT, the open method Stable Diffusion used
- Survives almost nothing: JPEG q90 leaves 67%
- 50% is a coin flip. Brightening does worse than chance
- SynthID is learned and much stronger, but it's closed. Its limits are disputed.

Our run, 3 Nov 2026 (invisible-watermark library; 64-bit message on one image). A different and much weaker method than SynthID. Unmarked control: 50%.

Where the rules are, today (this is not legal advice)

Where	What applies	Note for you
EU	AI Act Art. 50 since 2 Aug 2026. Deepfakes labelled by whoever publishes. Existing tools must mark outputs by 2 Dec 2026	Applies if your work reaches the EU. Code of Practice and icons, June
Mainland China	Labelling Measures since 1 Sept 2025: visible and hidden labels. Douyin, Xiaohongshu ask creators to declare	Don’t remove labels from Kling or Seedance outputs
USA	No federal label law. Thaler: AI alone cannot be an author (cert. denied 2 March 2026). California has its own act	How much human input is enough? Still open: Allen
Hong Kong	Cap. 528 covers computer-generated works: author is whoever “made the arrangements”. 2024 consultation on AI	Unusual. Check for updates
Festivals	Cannes, Oscars, Nikon, Comic-Con: each has its own rule	Read the rules before you enter

Reed Smith, 4 Aug 2026; Caixin, 3 Sept 2025; Mayer Brown, 11 March 2026; Lewis Silkin, 4 Nov 2024; CEDB consultation paper, July 2024; Animation Magazine, Jan 2026 (San Diego Comic-Con).

The art exception: a line in the EU rules written for you

The rule

If a deepfake is part of an “evidently artistic, creative, satirical, fictional” work, disclose in a way that does not “hamper the display or enjoyment of the work”.

So you may

Use an opening notice, accompanying text, or end credits, rather than a label on screen the whole time.

Likely a deepfake

Fully AI actors, synthetic voices, de-ageing, digital resurrection, simulated performances.

Likely not

AI backgrounds, effects, normal post-production. Advertising is unlikely to count as art. Be careful with branded work.

EU AI Act Art. 50(4); Commission Guidelines, 20 July 2026, as summarised by Reed Smith, 4 Aug 2026. Not legal advice.

The artist’s dilemma: a label costs you, and hiding costs more

IF YOU LABEL

People rate worth and depth lower, even for the same image.

Bellaiche et al., 2023: d = 0.61 for worth.

IF YOU HIDE

You may get found out: by microscopists, by a watermark, by a jury. And you lose the prize and your name.

Nikon, October 2026.

The way out in the data: a strong story reduced the gap. So don’t write “AI-generated”. Write what you did: a credit, not a warning.

Signing also means asking

1

Your sources

Seedance 2.0, February: MPA, SAG-AFTRA and Disney objected to likenesses and characters. Don’t build on those.

2

Your subjects

A2’s rule stands: no real person’s face or voice without consent. No misleading clips.

3

Your own work

Have I Been Trained to look for it. Glaze against style copying. A “do not train” credential: a request, not a lock.

AP, Feb 2026; AMCC 5160 Assignment 2 brief; haveibeentrained.com (Spawning, Lecture 05); glaze.cs.uchicago.edu.

Useful: a credit block you can copy for A2 and A3

```
“Morning Tram” (2026). 24 s. AI-generated video, sound, edit.

Director: Your Name.

Models: Seedance 2.5 (video), Veo 3 (sound test, not used).
Prompts and log: in report, slides 4–7.

Human work: script, 41 attempts, final 6 selected, edit, grade.

References: my own photos, Central, Oct 2026.
Source clip reverse-engineered: [title], by [creator] (link).

Consent: no real person’s face or voice.

Disclosure: fully AI-generated images and sound.
```

- Models and versions: Lecture 07 said pin them
- Human work: count your attempts. It’s your story
- References: yours or credited
- Consent: say it, even when “none needed”
- Disclosure: one plain sentence
- Put it in the end credits and your report

Template for this course. Example details are invented for illustration. A3’s report already has a credits section; A2 asks you to credit your source.

IN CLASS · 3 MINUTES

Write the credit block for your A2 or A3, as it stands today.

You will find a hole: a model version you forgot, a reference you can’t trace, a person you never asked. That hole is your homework. Then swap with a neighbour and verify a file at contentcredentials.org/verify.

Four stories, one line each

1

Looking

Say which question you are answering. Look before you judge.

2

Measuring

Scores see a narrow thing. And a score is already inside your model.

3

Showing

Critics argue about what a museum is for, and consent has two layers.

4

Signing

A credential proves things when present, nothing when absent. Credit, don’t apologise.

Debate: you run the Madison museum. Do you show Diffuse Control?



Side A: yes, show it

Museums exist to show what art is becoming, and to host the argument. No blanket policies. Say how it works on the wall.



Side B: no, not on this model

A museum's name gives legitimacy. Its own artists were not asked about the training data. Commission a model trained on consented data, or wait.

Case: Wisconsin Public Radio, 25 Sept 2026. Sides are for class debate and do not state my view.

This week

→ Quiz 10

Two technique, two art, one reading reflection. On the course site; due by semester end.

→ A2 and A3

Due 30 November, 23:59. Add a credit block. Look at your clip for 3 minutes first.

→ Finals

17 and 24 November. You ask first, we respond. Bring wall text and your one constraint.

Next week: video reasoning, creative agents, speculative practice, and presentation coaching.

Three readings for this week

1

How to Read an AI Image

Eryk Salvaggio. Art and technique. Try his steps on one image of your own.

2

LAION-Aesthetics

LAION blog. Technique. Short. How taste got its number. Look at the example grids by score.

3

A museum's AI show, and pushback

Wisconsin Public Radio, 25 Sept 2026. Culture. Use it in tonight's debate.

Optional: Jennifer Roberts, "The Power of Patience"; Yavuz's letter to Pope Leo; CMU 16-726 Lecture 20 slides; ARTnews on Post Generation.

All links in one place

STORY 1 · LOOKING

- ▶ See, Think, Wonder (Harvard)
- ▶ The Power of Patience
- ▶ How to Read an AI Image
- ▶ Critical Topics: AI Images
- ▶ Pope Leo, 2 Oct 2026
- ▶ Yavuz's open letter
- ▶ Word of the Year: slop

STORY 2 · MEASURING

- ▶ CMU 16-726 Lecture 20
- ▶ Stanford CS236 Lecture 15
- ▶ VBench
- ▶ VBench-2.0
- ▶ Video arena leaderboard
- ▶ LAION-Aesthetics
- ▶ PhysHPO (our lab)

STORY 3 · SHOWING

- ▶ Watch: A Face Only a Mother Could Love
- ▶ Watch: inside Dataland
- ▶ Watch: Diffuse Control (Beeple)
- ▶ Watch: Molnár interview
- ▶ Dataland
- ▶ Artsy on Dataland
- ▶ Madison: WPR report
- ▶ V&A: Vera Molnar
- ▶ Post Generation (ARTnews)
- ▶ AIF 2026 winners
- ▶ Reply AI Film Festival

STORY 4 · SIGNING

- ▶ Verify a file
- ▶ C2PA
- ▶ Nikon story (Gizmodo)
- ▶ EU Art. 50 guide
- ▶ Reed Smith on the art exception
- ▶ Have I Been Trained
- ▶ Glaze

TO TAKE HOME

Generating is now cheap. Looking, deciding, and signing your name are not.

That is the course in one line. See you next week.

Demo clips and images belong to their creators, shown for teaching and criticism. Full source list on the lecture page.

Crit sheet: copy this for your final presentation

Step	Say or ask	Don't
1 Meaning	What stayed with me? What surprised me?	"It's good" / "It's AI"
2 Artist asks	The questions you most need answered	Defending or explaining
3 Neutral questions	"What was your rule for the camera?"	"Why did you…" with a hidden opinion
4 Opinion, by permission	"May I give an opinion about the ending?"	Opinions nobody asked for
5 Default check	What here is the dataset talking? What did you fight?	"The AI did it"
6 Credit check	Models, data, consent, disclosure in one block	Vague "AI tools"

Adapted from Liz Lerman's Critical Response Process; Salvaggio's reading questions.

Toolkit: compare your own versions and sign your work

```
# Compare your own versions
pip install clean-fid          # careful resizing
# from cleanfid import fid
# fid.compute_fid('my_v1/', 'my_v2/')
pip install lpips              # perceptual distance

# Video: the VBench suite
git clone https://github.com/Vchitect/VBench

# Sign and read Content Credentials
pip install c2pa-python
# or the command line tool, c2patool:
c2patool mywork.jpg            # read a manifest
c2patool mywork.jpg -m m.json -o out.jpg   # sign

# Check anything, in your browser
https://contentcredentials.org/verify

# Remember: the Python demo in tonight's lecture needs
# your own certificate. Ours was a class demo, so readers
# report "signingCredential.untrusted".
```

- Good for comparing your own pipeline, bad for “is it good”
- Fix the resize, the number of images, and the seed
- For PSNR/SSIM: scikit-image
- A real signing certificate comes from a trusted provider; ask before paying

Review checklist before you show a generated piece

1

Nine minutes

Look for three minutes at least. What is on purpose?

2

Default

What would the model do alone? Is yours different?

3

Time

Watch it. Scores can’t. Does the ending work?

4

Consent

Sources, subjects, music, voices. Who did you ask?

5

Label

Tool’s labels intact? Rules of the festival read?

6

Wall text

Four lines, 60 words. Credit block in the end credits.