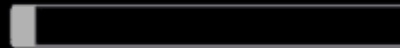


This is a compressed PDF file.
Please kindly request for original files with animation.

Loading...



Which one is artificial?

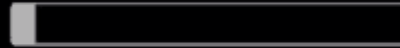


AI-Generated

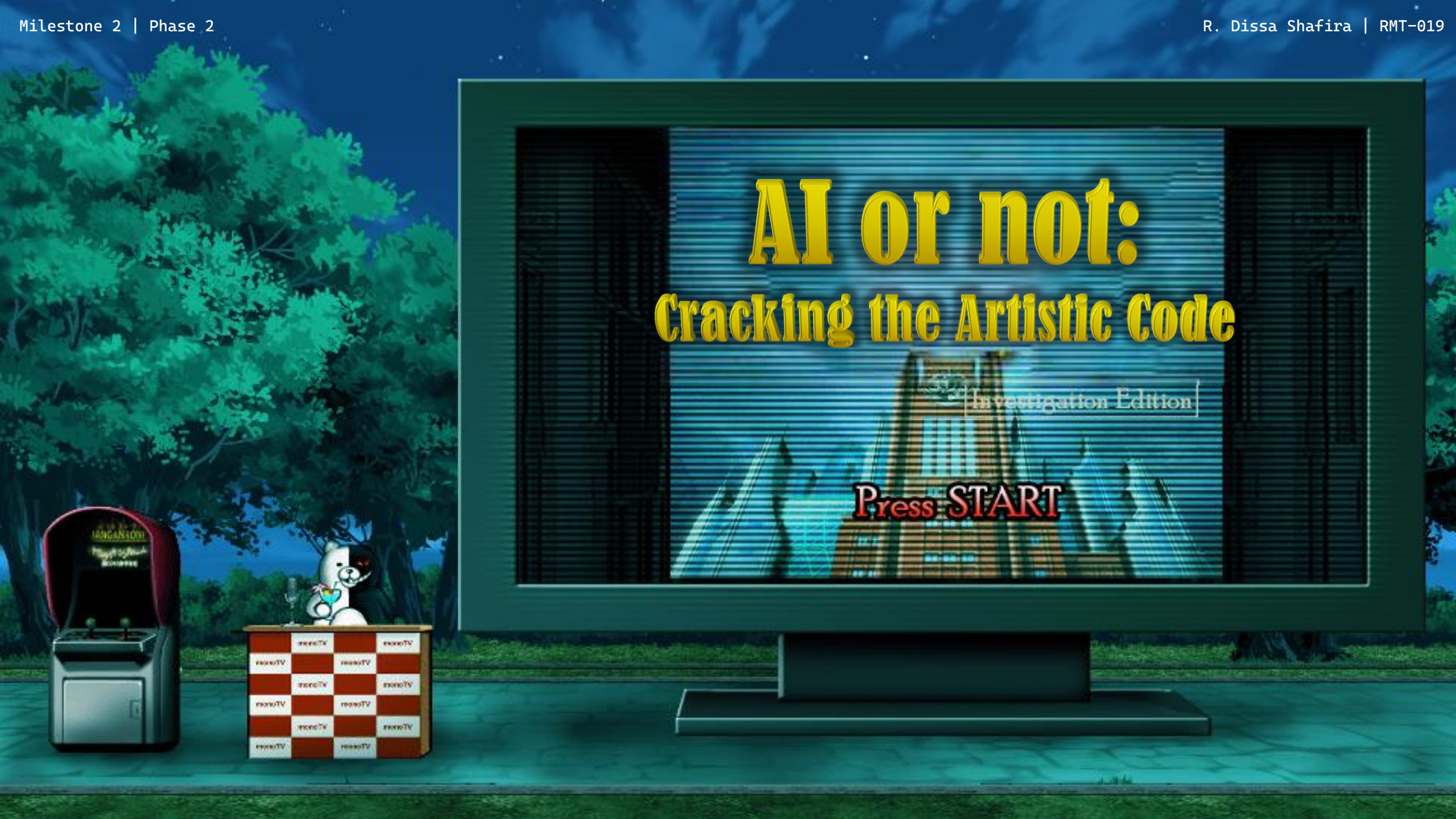


AI-Generated

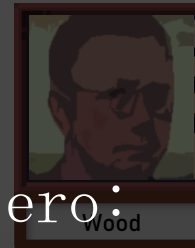
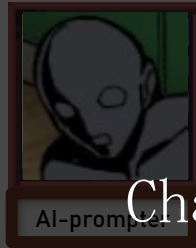
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Did you know? In 2018, an AI-generated artwork titled "Portrait of Edmond de Belamy" sold for over \$400,000 at an auction, sparking a debate about the value and authenticity of AI-created art.



The emergence of AI art has brought both excitement and skepticism.



Chapter zero:
Why should we?

"Give me a painting that looks like it was made by <insert artist's name>"

"Hell! That is not my work?"



- Enabling artists to explore new techniques and styles
- Accessible to a wider audience

- The depth and originality of AI-generated artwork
- Issues of copyright and ethical implications (for artist whose art used to train the AI without permission)

Are you excited about the emergence of AI-art?

> Yes!

> No



Human-made?

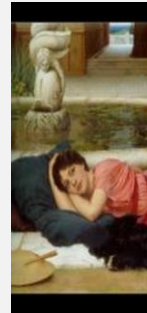
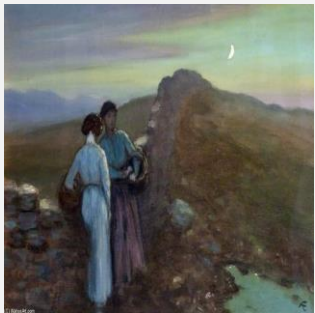
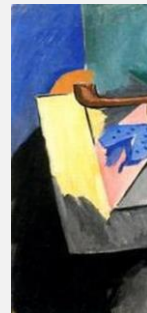
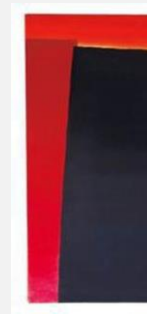
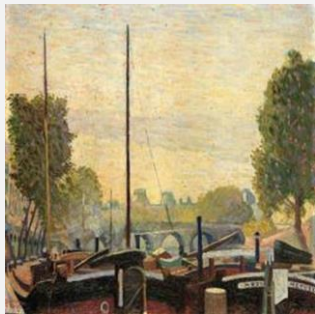


AI-Generated?

Chapter one: How to differentiate them?



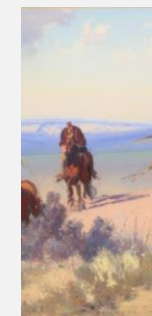
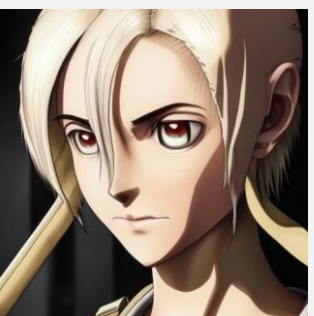
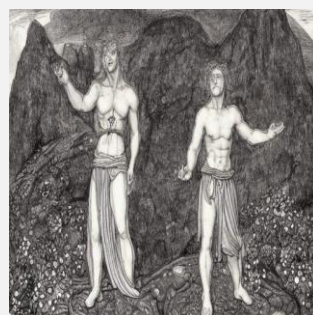
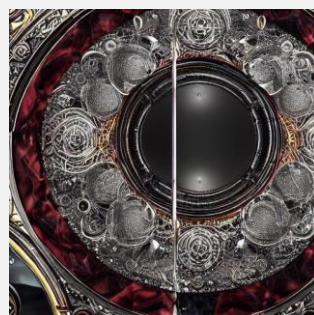
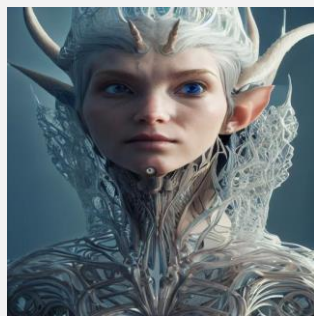
What can be categorized as 'AI-generated' and what not?



```
Human-made from our dataset:
> Hand painted traditional paintings
> Free stocks/ consented artist
```

Copyright issues

We noticed that our dataset contains old paintings; probably because the copyright of an artist's work expires approximately 70 years after the artist's passing.

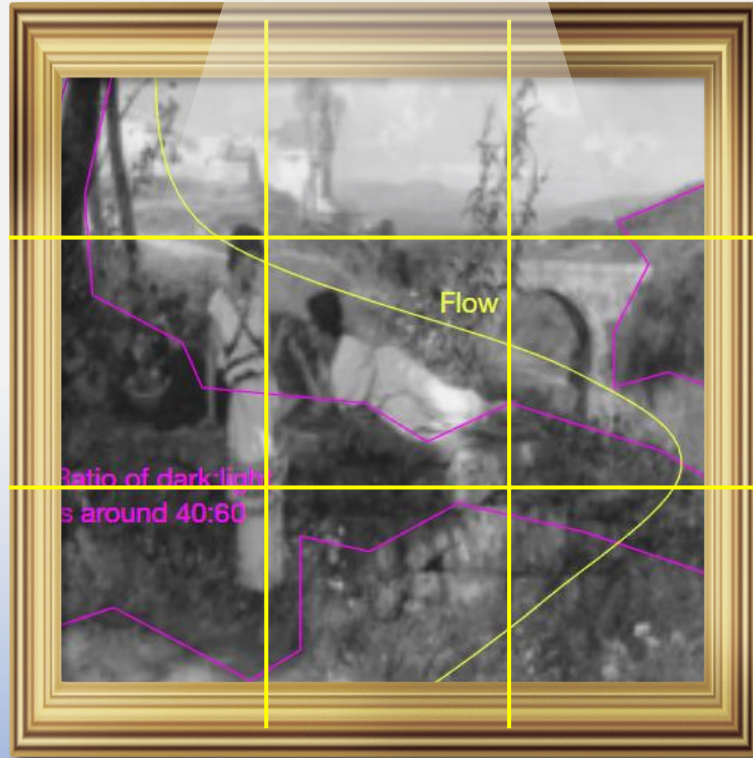


AI-Generated from our dataset:
> Traditional paintings
> Digital paintings

Outdated issue

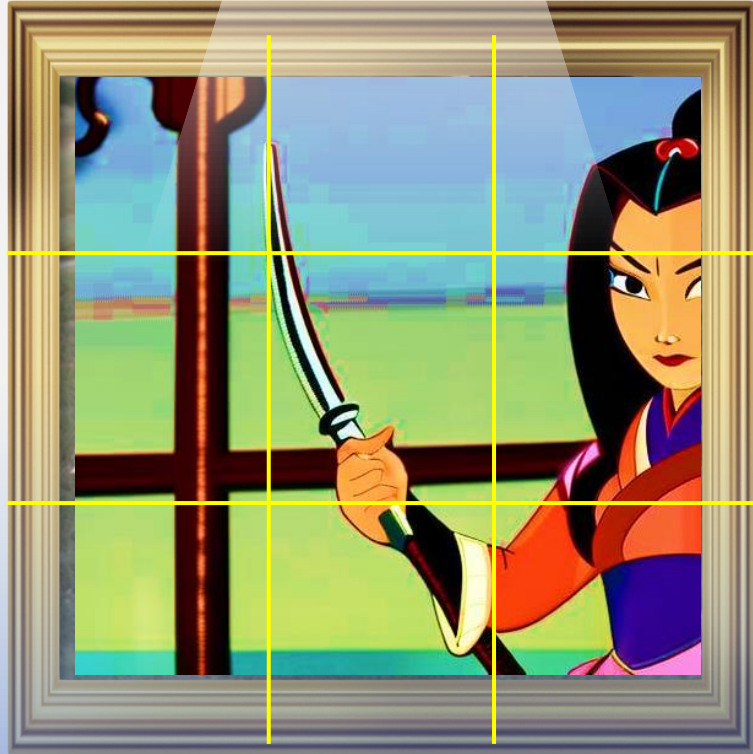
Our dataset does not include very updated AI-generated art since the data collection was conducted up until January 2023.

Human



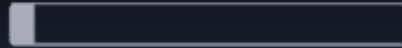
Probably, similar as to how you would calculate an object boundaries in an image.

Artificial



They also looked like theyre robust to saturation.
They may incorporate colors that dont exist in the
real world.

Loading...



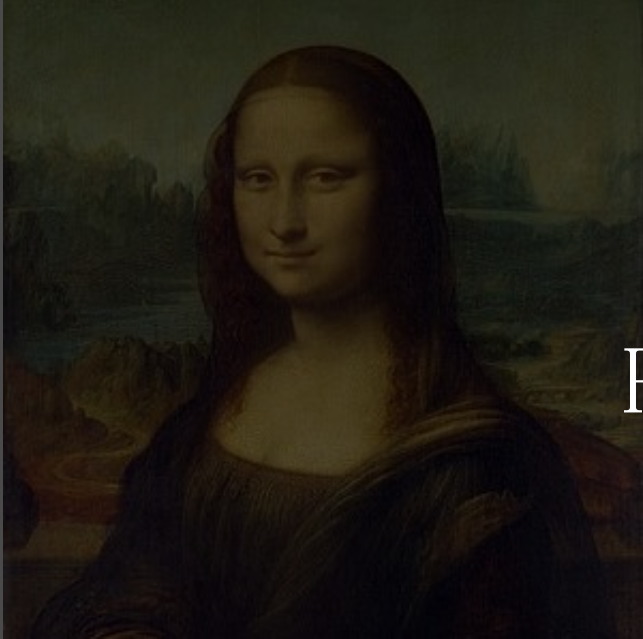
Those are the things that us human perceives. We are uncertain if our machine can perceive them in the same way.

We are going to conduct an experiment using a CNN model;

a powerful tool that can analyze and detect various visual features, including brush strokes, composition, and more.



Upload an image



Predict

Result: Likely Man-made

Coincidence?

	precision	recall	accuracy
Human	0.86	1.00	
AI	1.00	0.83	0.92

Chapter two:

Predict some images

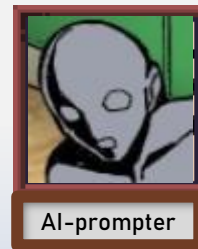


Surprisingly, the simplest model performs the best.

We found that augmented data didnt improved the models performance significantly.

Model was chosen for its better fitting, efficiency in training time (70s from other model 350s), and better overall performance

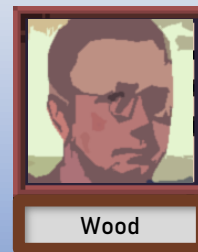
Can we believe you?

Human Predicted as Human	Human Predicted as AI
32	0
AI Predicted as Human	AI Predicted as AI
5	24



Hehehe, I got into this company using AI :p

Ooh, so that's where they can spot it. Then I can be better by fixing this exact one...

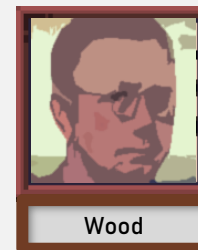


My drawing got the answer "Looks generated". So based on your deductions, you mean my drawing looks fake, smeared, dull, and lacks of focal points?!

I spot this fraud!!

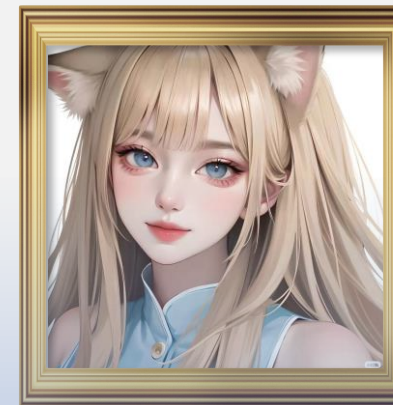


Hehehe, I got into this company using AI :p



I hired the wrong person!
He doesn't understand basic anatomy!

Fail to predict artificial



Composition

Color palette

Advancement

The old adage that the more realistic the work is, the better it is, is still valid today. It is not enough to have a good idea and a good composition. The work must also be executed with skill and precision. The AI-generated images, while visually appealing, often lack the depth and nuance of traditional art. The color palette is often dull and the composition is often poor. The AI-generated images are a good example of the failure of AI to predict the quality of human art.



Why did I get the answer “Looks generated”?!



Fail to predict human-made



Limited source



It was digital

Additional, the dataset used for training may have included paintings and photographs of human-made digital art, causing the model to misclassify modern-looking digital art as AI-generated could be attributed to the absence of such contemporary artworks in the training set.



Loading...

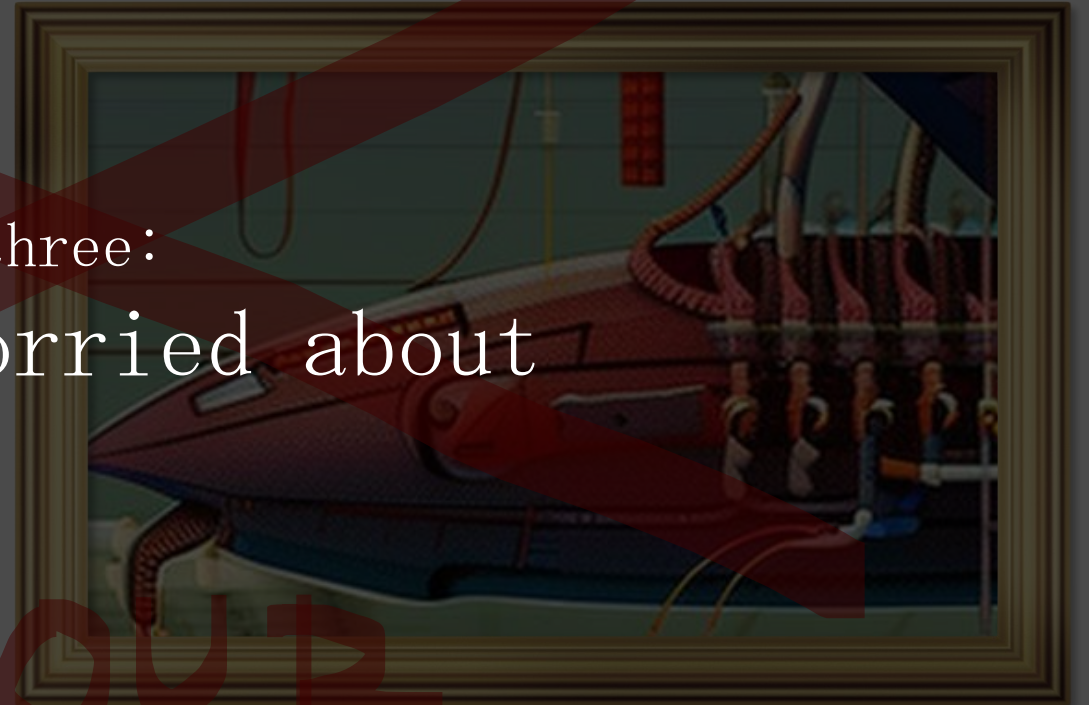


Did you know? Contemporary artists are now “protecting” their artwork using “style cloaks”.
The cloaks make calculated changes to pixel within images; enough to “fool” AI model for the time being.

Which one is traditional art?



Traditional



Digital

Chapter three:

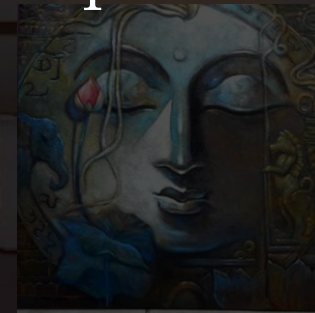
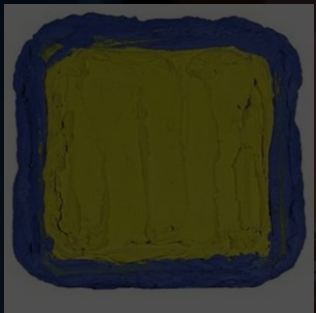
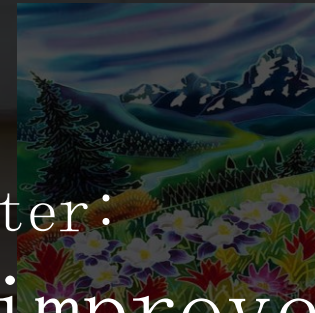
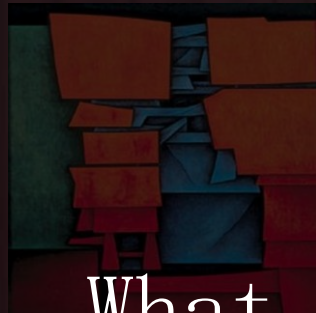
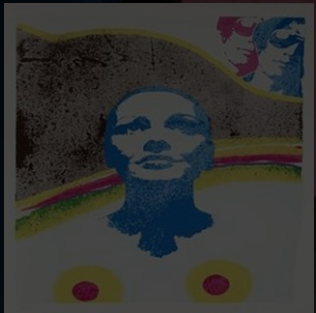
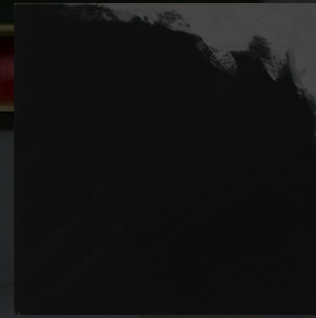
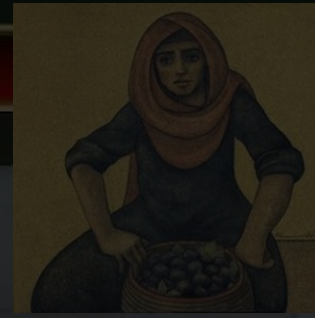
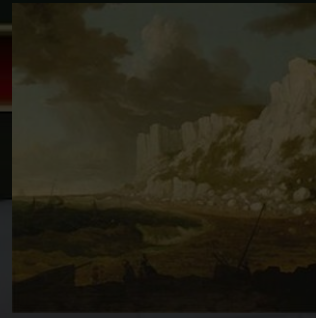
What we are worried about

NOT OUR
PURPOSE

A pixel art illustration of a building facade, featuring a central window with a decorative arch and a circular window above it. The building has a tiled roof and arched windows on the ground floor. A large, thick red 'X' is drawn across the entire image, from the top-left to the bottom-right. Overlaid on the image is the text 'THIS IS REAL ART' in a white, hand-drawn, pixelated font. The word 'THIS' is on the top line, 'IS' is on the second line, 'REAL' is on the third line, and 'ART' is on the fourth line. A white arrow points from the word 'IS' down to the word 'ART'.

THIS IS
REAL ART

We hope to create a space where different
artistic styles and approaches can thrive.



Last chapter: What can be improved?

Different algorithms that actually detect
artificial behavior, rather than what is
“visually looks artificial”.

*“Beauty is in the
eye of the beholder.”*



Please note that while our AI art detection model can be an assist, it is **should not be** the sole determinant of artistic authenticity nor to articulate how visually “fake” and “bad” an art is. It is meant to be used as a tool to gain a richer understanding and appreciation of art in its various forms.

We believe in a world where different forms of creativity can **coexist**.

GAME OVER

Down five...