

# Chatbots & AI – a new frontier in higher education



DALL·E History Collections

Edit the detailed description

Surprise me

Upload



In the style of Salvador Dali – titled 'holding back the incoming tide'

Generate

## Conclusion

In conclusion, chatAPIs and GPT-3 have the potential to offer a range of benefits for higher education, including increased student engagement, collaboration, and accessibility. ChatAPIs can facilitate asynchronous communication, provide timely feedback, enable student groups, and support remote learning, while GPT-3 can be used for language translation, summarisation, question answering, text generation, and personalised assessments, among other applications. However, these tools also raise a number of challenges and concerns, particularly in relation to academic honesty and plagiarism. ChatAPIs and GPT-3 can be used to facilitate cheating, and it can be difficult to distinguish between human and machine-generated writing. Universities must carefully consider the potential risks and rewards of using these tools and take steps to ensure that they are used ethically and responsibly. This may involve developing policies and procedures for their use, providing training and support for students and faculty, and using a variety of methods to detect and prevent academic dishonesty. By addressing these challenges, universities can take advantage of the opportunities offered by chatAPIs and GPT-3 while safeguarding the integrity of their assessments and the quality of their educational programs.

## Discussion

As the alert reader may already have guessed, everything up to this point in the paper was written directly by ChatGPT, with the exception of the sub-headings and references. Our intent in taking this approach is to highlight how sophisticated Large Language Machines (LLMs) such as ChatGPT have become; an approach similar to that of Transformer et al., (2022), who recently explored the extent to which GTP-3 could be used to write aspects of an academic paper on itself, with minimal human input.

The only contribution of the authors in the previous sections has been in providing prompts to ChatGPT including the following:

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[https](https://doi.org/10.1080/14703297.2023.2190148)

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## Professors published a paper on AI with a 'plot twist' – ChatGPT wrote it



By [Daniel Wu](#)

March 23, 2023 at 6:23 a.m. EDT



From left to right: Reuben Shipway, Debby Cotton and Peter Cotton. The three educators based in Plymouth, England, submitted an academic paper on the dangers of generative AI and plagiarism that was written using ChatGPT. (Courtesy of Reuben Shipway, Debby Cotton and Peter Cotton)

# Shedding light on Chatting & Cheating

In the style of Georgia O' Keefe, titled 'bioluminescence sheds light'



# Shedding light on Chatting & Cheating

Essay



Re: Essay



Reuben Shipway

To:  Pete Cotton



Tue 03/01/2023 12:03

Hi Pete

The first thing I thought of when you sent the original email was to plug the questions into ChatGTP and my essay output was pretty similar to yours. I actually thought 'helping shed more light' was too sophisticated a pun for AI though, so just thought it was shoddy referencing...

The good news is that OpenAI are actually in the process of water-marking their outputs to make this plAlgiarism (just made that up but think it's pretty good) easier to spot.

Anyway, on a tangential topic, how do you feel about co-authoring a paper written almost entirely through AI on the challenges academia faces with AI essay generation?

Cheers

Reuben

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Despite the many known uses of bioluminescence in marine systems, there is still much that scientists do not understand about this phenomenon. For example, the exact mechanisms by which some organisms are able to produce light are still not fully understood, and there is much research currently being done in this area.

In conclusion, bioluminescence is a fascinating and important phenomenon that occurs in many different marine systems. It has a variety of different uses, including communication, defence, and reproduction, and is often used in conjunction with other forms of light production. While much is known about bioluminescence, there is still much that scientists do not understand, and ongoing research is helping to shed more light on this mysterious and beautiful aspect of the natural world.

← Reply

↶ Reply all

↷ Forward

# Shedding light on Chatting & Cheating

RE

Produce several witty and intelligent titles for an academic research paper on the challenges universities face with chatgpt and plagiarism...

Write an original academic paper, with references, describing the pros and cons of using AI, such as chatgpt, in academia. Include both the academics and students perspective.

Write an original academic paper, with references, evaluating the challenges academic staff face in marking student assignments written by chatgpt

Write an original academic paper, with references, outlining best practice for marking student assignments written by AI like chatgpt

Write the methodology section in an academic journal article outlining how chatgpt technology was used to write this methodology section

# Shedding light on Chatting & Cheating

[3/01/23](#) – conceptualise paper

[9/01/23](#) – preprint EdArXiv + manuscript submitted to AEHE

[24/02/23](#) – rejected AEHE + submitted IETI

[6/03/23](#) – accepted IETI

[13/03/23](#) – proofs circulated, manuscript published

[04/05/23](#) – 50 citations

## Take home

- Use a pre-print server for hot topic papers
- Using and not attributing large language models is plagiarism
- ChatGPT cannot be a co-author
- ChatGPT output can be sophisticated – see the reviewers of Chatting & Cheating
- This is moving rapidly – <100 days to 50 citations!

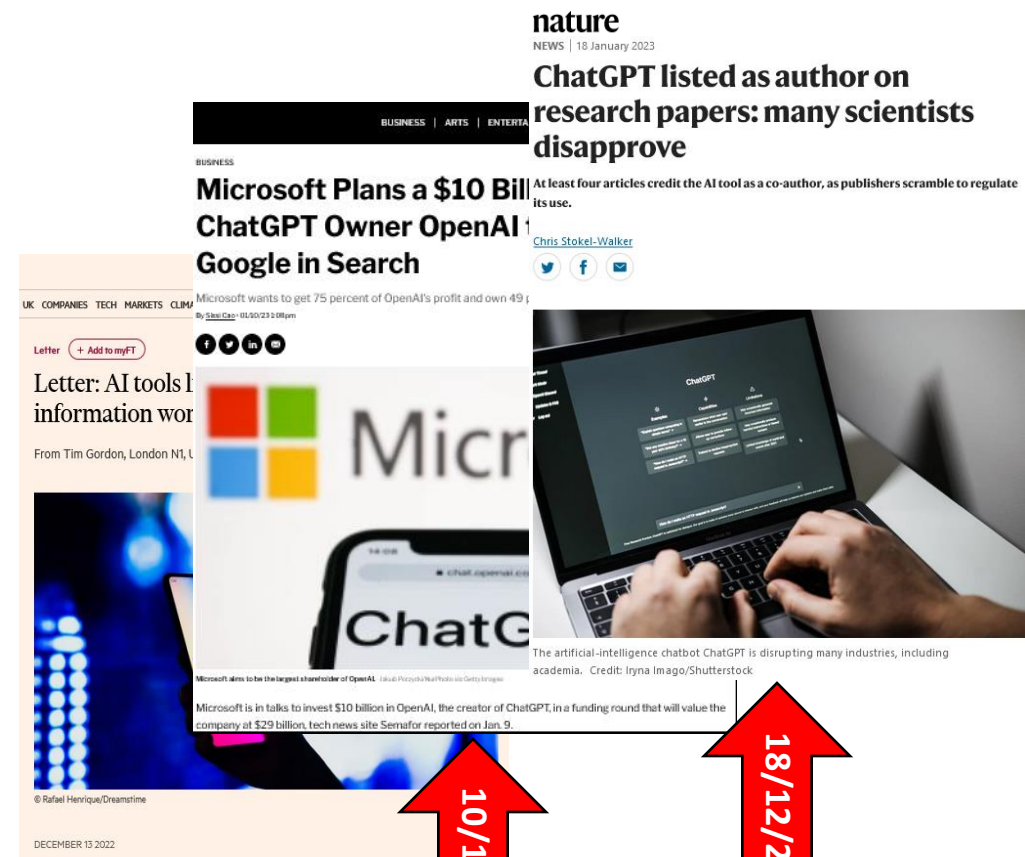
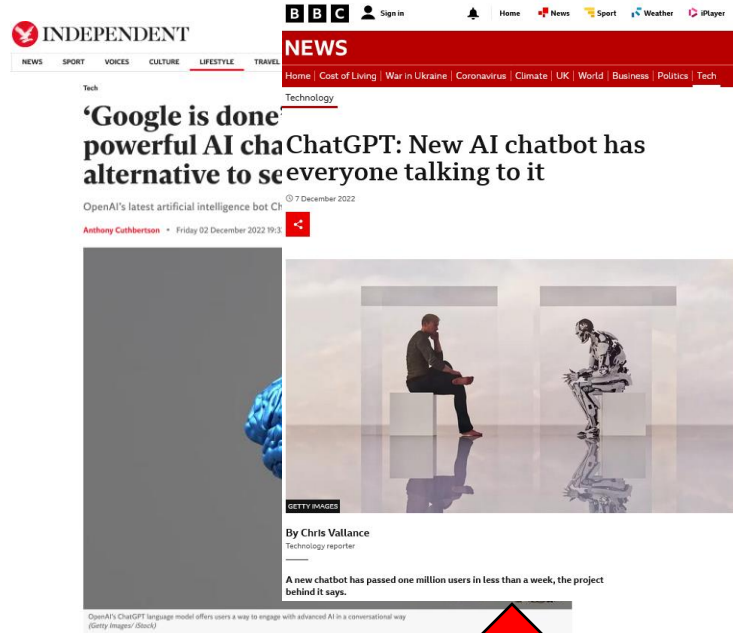


# The c[h]at is out the bag

In the style of Edvard Munch – titled 'the cat is out the bag'



# The c[h]at is out the bag

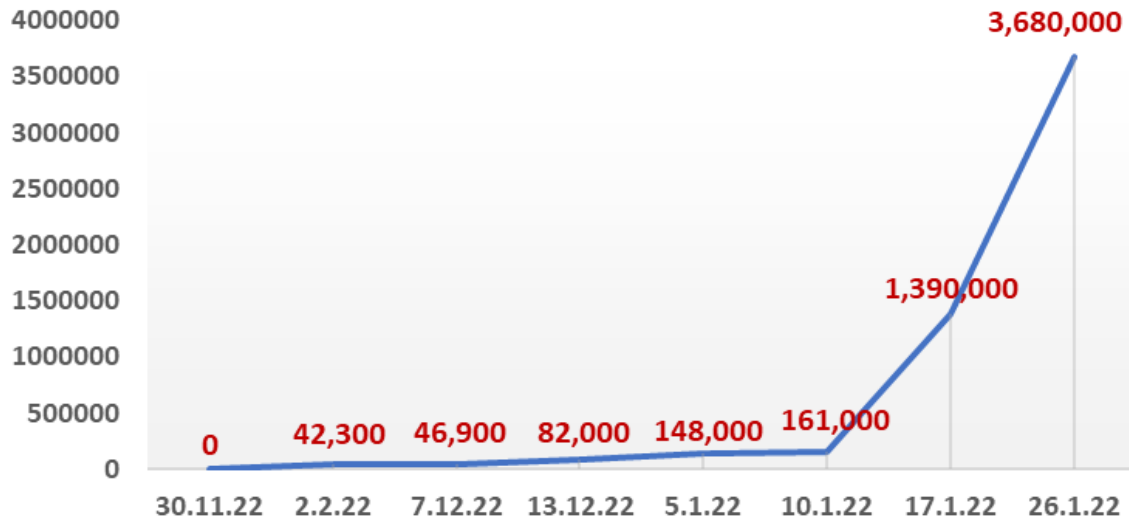


<https://trends.google.com/trends/explore?date=2022-11-27%202023-01-26&q=chatgpt>



# The c[h]at is out the bag

## #hits on Google News under 'ChatGPT' search



1	China	100	<div style="width: 100%;"></div>
2	Nepal	36	<div style="width: 36%;"></div>
3	Israel	30	<div style="width: 30%;"></div>
4	Singapore	30	<div style="width: 30%;"></div>
5	Norway	28	<div style="width: 28%;"></div>



## Facebook's Remarkable User Growth

Monthly active users from 2004 to 2012 (at year-end)



# ChatGPT causes a splash



In the style of David Hockney – titled 'Artificial Intelligence jumps into a pool - splash'

# ChatGPT causes a splash

-Worldwide reports of students using ChatGPT to cheat

In the style of August Renoir – titled 'Teachers protest calculators'



# ChatGPT causes a splash

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-The New York City Department of Education reportedly blocked access to ChatGPT in December 2022

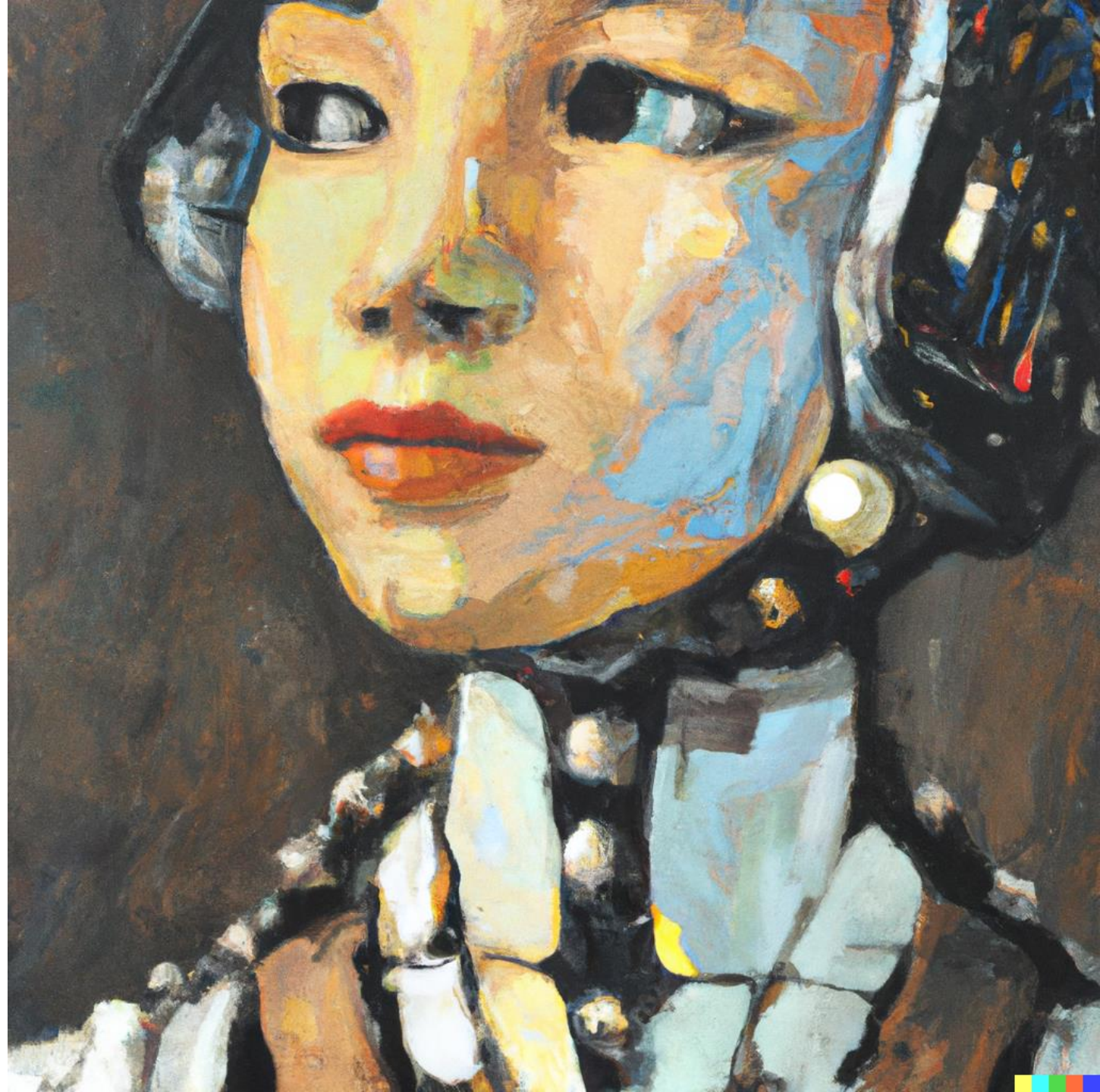
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**In the style of Johannes Vermeer – titled 'my AI co-author'**



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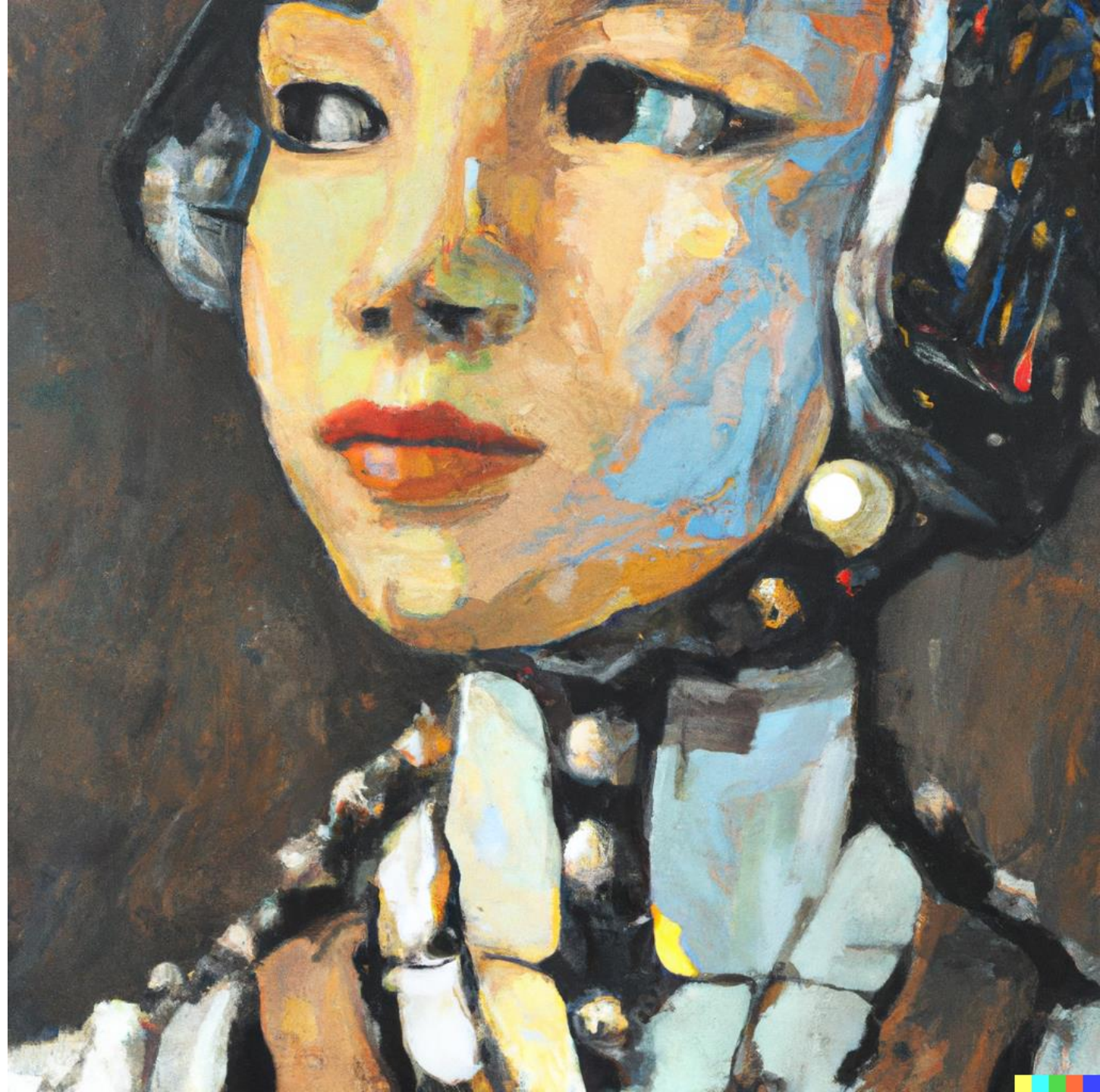
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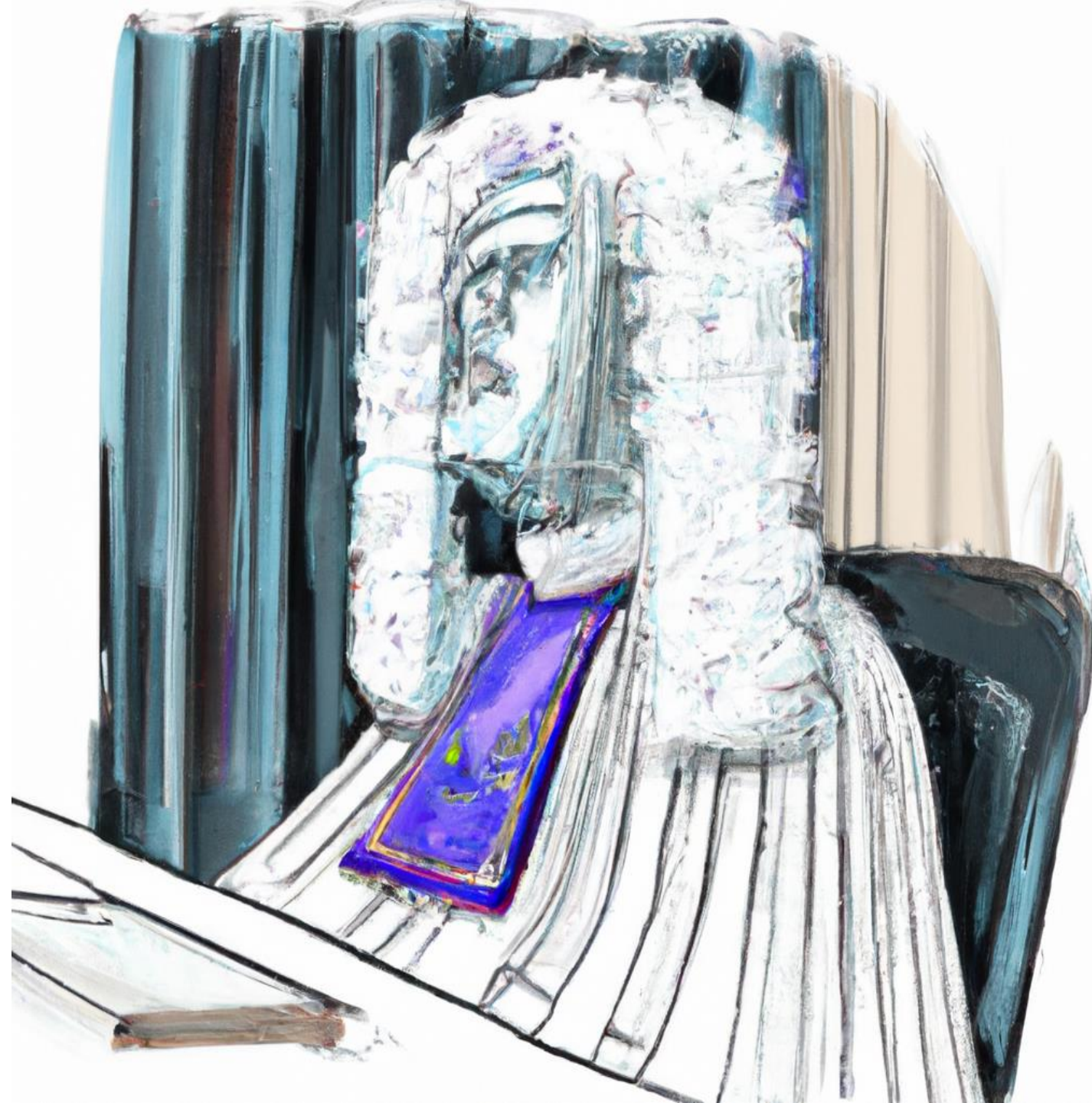
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In the style of a courtroom sketch – titled 'courting justAIce'



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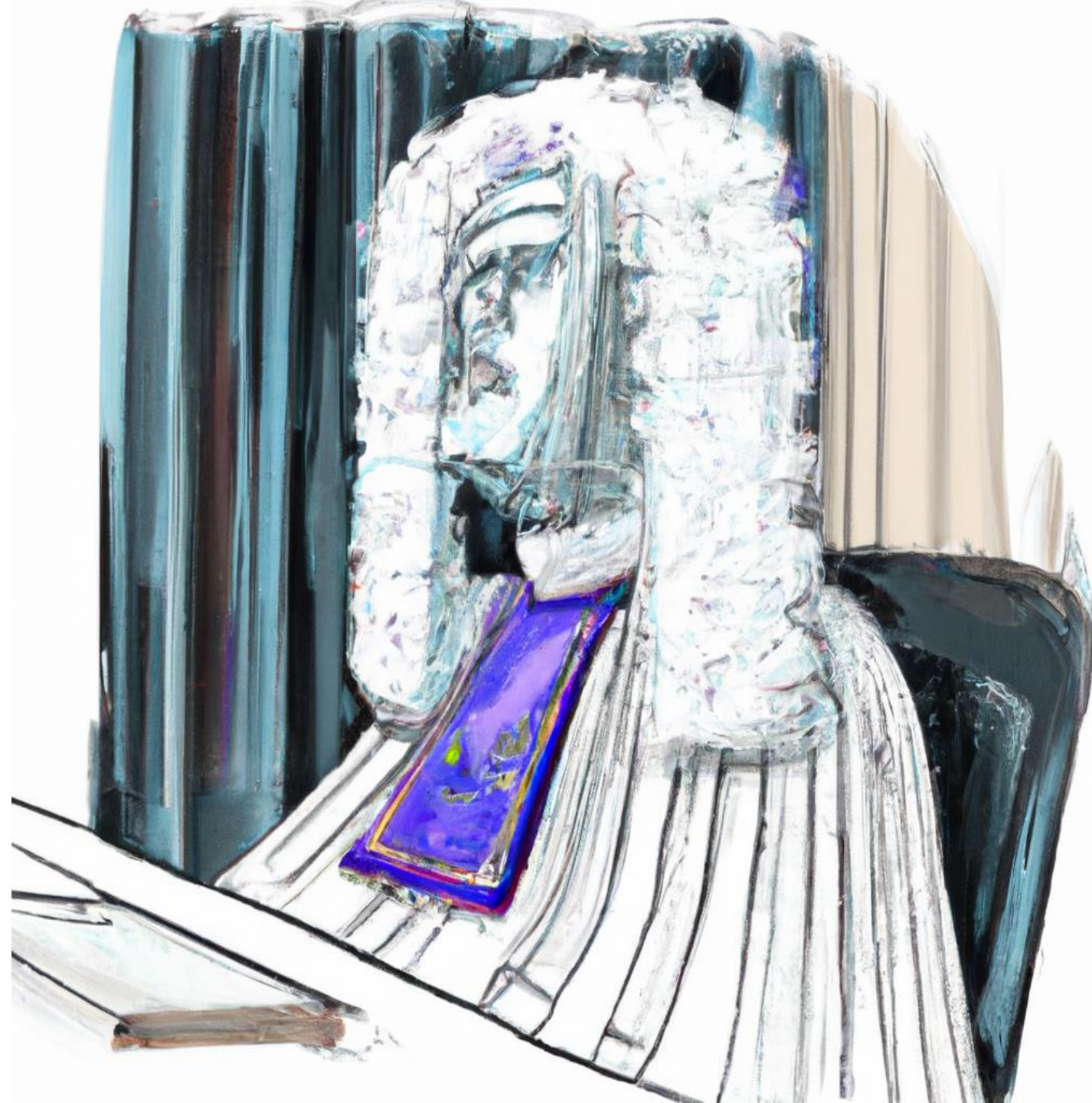
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-Judge in Pakistan uses ChatGPT to decide bail case

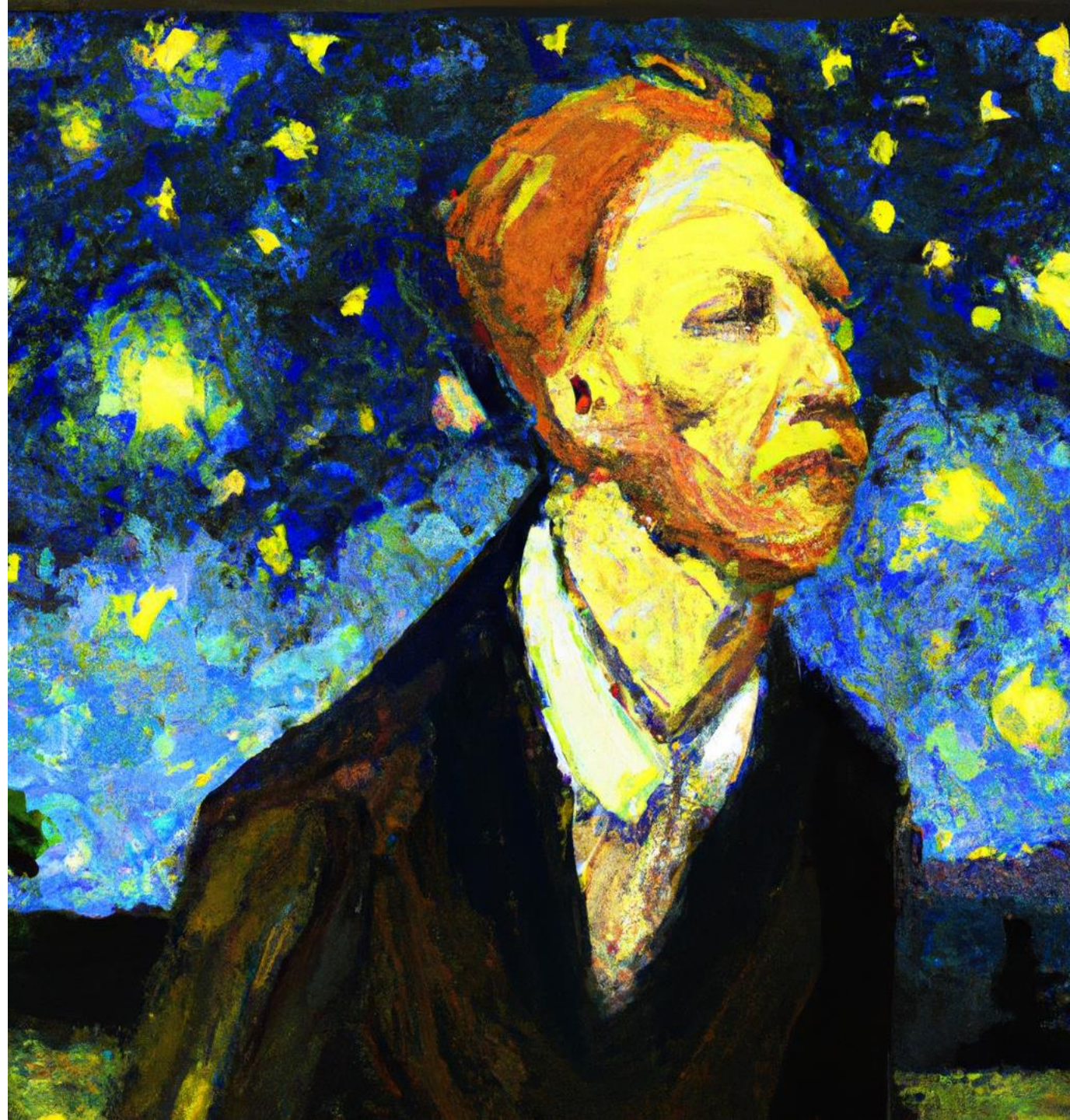
**In the style of a courtroom sketch – titled ‘courting justAIce’**





# ChatGPT – a universe of possibilities

In the style of Vincent Van Gogh, titled 'a starry night sky'



# ChatGPT – a universe of possibilities

Translate the following verse from English into Hungarian, Icelandic, Mongolian and Swahili: We got the power, etc...

**Hungarian:** Van erónk, van erónk Van bátorságunk, van hosszunk Van a képzeletünk, van a tervünk Van akaratunk, van az emberünk.

**Icelandic:** Við höfum kraftinn, við höfum styrkinn Við höfum þöguleika, við höfum lengdina Við höfum sjón, við höfum áætlun Við höfum vilja, við höfum manninn.

**Mongolian:** Бид их хөдөлмөрийг авсан бид их хүчийг авсан Бид их цахилгааныг авсан бид боломжийг авсан бид их зорилгыг авсан бид их хүнийг авсан.

**Swahili:** Tunatumia nguvu, tunatumia uwezo Tunatumia moyo, tunatumia urefu Tunatumia maono, tunatumia mpango Tunatumia nia, tunatumia mtu.



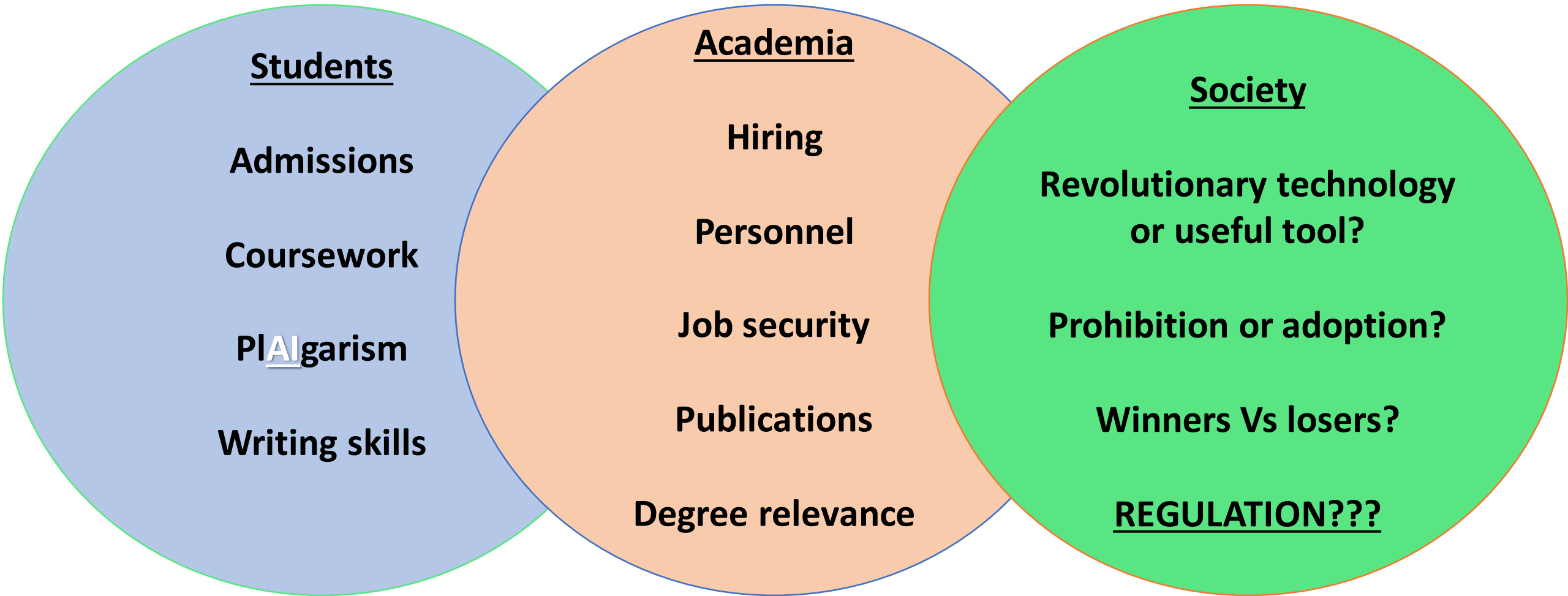
Piece titled 'gold wallpaper, platinum album'

# ChatGPT – future landscapes

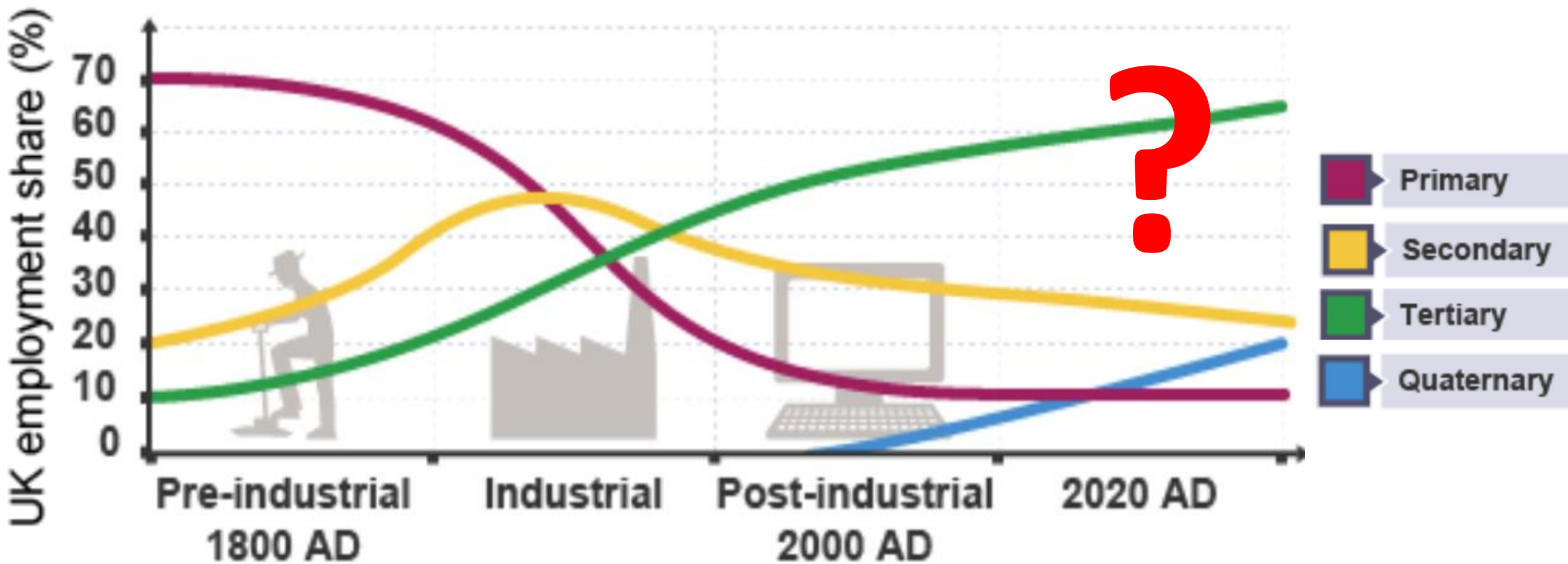
In the style of JMW Turner, titled 'future landscapes of humanAlty'



# ChatGPT – future landscapes



# Are we now redundant?



**Thank you for listening**

**In the style of William Blake, titled 'Adam and Eve are devoured by the apple of knowledge'**

**Any questions?**





**Dr Reuben Shipway**

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University of Plymouth

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🐦 @ReubenShipway

## Chatting and cheating: Ensuring academic integrity in the era of ChatGPT

Debby R. E. Cotton <sup>a</sup>, Peter A. Cotton <sup>b</sup>, and J. Reuben Shipway <sup>b</sup>

<sup>a</sup> SCION Research Group, DREC – Plymouth Marjon University, Plymouth, UK <sup>b</sup> PAC - School of Biological and Marine Sciences, University of Plymouth, Plymouth, UK

### ABSTRACT

The use of artificial intelligence in academia is a hot topic in the education field. ChatGPT is an AI tool that offers a range of benefits, including increased student engagement, collaboration, and accessibility. However, it also raises concerns regarding academic honesty and plagiarism. This paper examines the opportunities and challenges of using ChatGPT in higher education, and discusses the potential risks and rewards of these tools. The paper also considers the difficulties of detecting and preventing academic dishonesty, and suggests strategies that universities can adopt to ensure ethical and responsible use of these tools. These strategies include developing policies and procedures, providing training and support, and using various methods to detect and prevent cheating. The paper concludes that while the use of AI in higher education presents both opportunities and challenges, universities can effectively address these concerns by taking a proactive and ethical approach to the use of these tools.

### KEYWORDS

Machine-generated writing, plagiarism, higher education, detection and prevention