

# AI Biases in the Art Sector through the Lenses of European Union Law

**Francesca Prandi**

University of Turin  
francesca.prandi470@edu.unito.it

**Harshad Pujari**

MMDC  
harshadsbpujari@gmail.com

## Abstract

The use of AI has been extensively growing in the past few years. AI is consistently used in employment relations, education and law enforcement. However, the field of art has not been ignored by such technology. While the use of these technologies will surely rise in the near future, their use has highlighted the existence, even in this sector, of an insidious phenomena: discrimination. Scholar Joo-Wha Hong considered this issue along with biases in perception of Art produced by AI, questioning “is AI even capable of making art?”

## European Union and AI

According to the definition given by the European Commission High-level Expert Group on Artificial Intelligence (HLEG) an AI, to be trustworthy, should present three main components: (1) it should be lawful, complying with all applicable laws and regulations (2) it should be ethical, ensuring adherence to ethical principles and values and (3) it should be robust, both from a technical and social perspective since, even with good intentions, AI systems can cause unintentional harm.

From this definition, we can derive that in every sector AI is implemented, there are some essential features which can't be left aside, otherwise AI systems would provide much more damage than benefit. As an example, AI is increasingly used in the art sector and, in this sense, a significant problem has arisen. Some scholars argue whether: “when AI is used to create literature, art or music should it be treated as a human artist, namely receiving rights under copyright and patent law?” (Barfield and Pagallo, 2020). However, our short analysis will mainly revolve around another interesting

question: “Who is to be held liable if an AI commits an error in the art sector, maybe leading to discrimination?”

## Image Net Roulette

An artistic research program, using an AI system called “ImageNet Roulette” which aimed at gathering faces for a work of art to be exposed at the Prada Observatory Foundation in Milan, found out that even when used for artistic purposes, an AI system can still present evident biases. In fact, people who decided to upload their photos on the website linked to the initiative received discriminatory comments based on their personal characteristics (such as “offender”, “wrongdoer” or “gook-slant eye”).

Albert Fox Cahn, executive director of the Surveillance Technology Oversight Project (STOP) in New York City, an advocacy group seeking an end to discriminatory surveillance commented:

ImageNet Roulette has been incredibly powerful in showing how the artificial intelligence we incorporate into our daily lives is fundamentally flawed and limited by the human decisions that go into it. This is why we find that every visual recognition program on the market has biases on the basis of race and error rates that are different between men and women. No system is completely objective, however we (humans) set these tools up, so the prejudices and assumptions human beings bring into these tools will shape the outcomes that we get.

## Conclusions

In every sector where AI is implemented biases could arise, because the way in which a developer feeds the system with data reflects his

or her own personal biases. The art sector, is not excluded from this. However, the field of art is still lacking general guidelines, given that no directive in the European Union addressing discrimination includes AI. Nevertheless, as the use of artificial intelligence grows, new policies regulating this phenomena in an effective way are deemed necessary.

**Harshad Pujari** is a graduate in Law and public policy. He's currently conducting research in the interdisciplinary study of media and public policy.

### References

- Barfield, Woodrow and Pagallo Ugo, 2020, "*Advanced introduction to: Law and Artificial Intelligence*", Cheltenham (UK): Edward Elgar Publishing Limited.
- European Commission, High-Level Expert Group on Artificial Intelligence, "*Ethics guidelines for trustworthy AI*," Brussels, 2019.
- Mello, John P. Junior, 2019. "Art Project Uncovers Bias in AI training models," *Tech News World*.
- Turner-Lee Nicol, 2019. "Algorithmic bias detection and mitigation: Best practices and policies to reduce consumer harms," accessed January 21, 2021. [https:// www.brookings.edu/research/algorithmic-bias-detection-and-mitigation-best-practices-and-policies-to-reduce-consumer-harms/](https://www.brookings.edu/research/algorithmic-bias-detection-and-mitigation-best-practices-and-policies-to-reduce-consumer-harms/)
- Vincent, James, 2020. "What a machine learning tool that turns Obama white can (and can't) tell us about AI bias," accessed January 21, 2021. <https://www.theverge.com/21298762/face-depixelizer-ai-machine-learning-tool-pulse-stylegan-obama-bias>.

### Biographies

**Francesca Prandi**, a Master's student in European Legal Studies at Turin University, is interested in the practice of Strategic Litigation and trainee at StraLi, an NGO promoting such practice in the Italian and European legal systems. She's currently writing her master's thesis on the legal and ethical correlations between the use of Artificial Intelligence and Climate Change.