

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front parallelogram is blue and the back one is a light green color. Both are oriented diagonally from the top-left towards the bottom-right.

Should Facial
Recognition System
be Regulated?



We'd like you to consider both how the existing systems should be regulated and also how we stop false positive matches by improving commercially available algorithms.



The Existing System

A facial recognition system is a technology capable of identifying or verifying a person from a digital image or a video frame from a video source.

Eg- Facebook uses this technology for automated face tagging.



Loopholes of Facial Recognition Existing System

Facial Color

**Biased and
Discriminatory**

**Autotagging -
GDPR violation**

**False
Identification**



Loopholes in existing system

- Amazon Rekognition Program-According to the Verge the facial recognition systems have struggled a lot when it came to women and color of people.
- As stated by ACLU-NC's Matt Cagle this technology is a biased one. It doesn't make communities safer. It just powers even greater discriminatory surveillance and policing.
- Auto tagging feature of Facebook sounds creepy according to the users, it directly violates the GDPR rules.
- False Identifications: Most concrete drawback of this technology is false identification mainly when used by Police as it may lead to a wrongful accusation.



Regulation of Existing Systems

01

VOLUNTARY LABELING

02

SECTORIAL REQUIREMENTS

03

MANDATORY RISK

04

SAFETY AND LIABILITY

05

GOVERNANCE



Regulation of Existing Systems

European Commission designed five regulatory options for AI that could be implied

- Voluntary labelling : Developers should themselves choose to comply voluntarily , whether they want or not.
- Sectorial requirements for public administration and facial recognition: the use of artificial intelligence by public authorities – as well as the employment of facial recognition technologies generally. The Commission document highlights provisions from the EU’s General Data Protection Regulation, which give citizens “the right not to be subject of a decision based solely on automated processing, including profiling.
- Mandatory risk: Based requirements for high-risk applications, this risk–based approach would focus on areas where the public is at risk or an important legal interest is at stake.
- Safety and liability: “Targeted Amendments” could be made to EU safety and liability legislation, including on the General Product Safety Directive, the Machinery Directive, the Radio Equipment Directive and the Product Liability Directive.



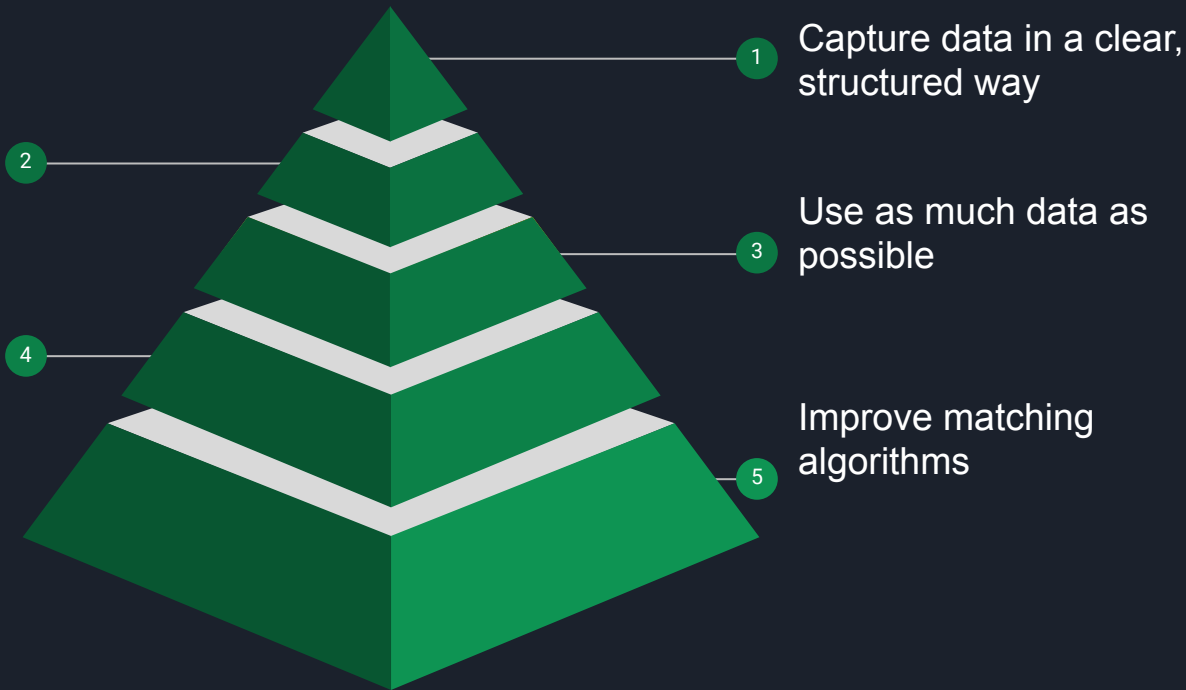
Regulation of Existing Systems

- Governance: the Commission says that an effective system of enforcement is essential, requiring a strong system of public oversight with the involvement of national authorities. Promoting cooperation between such national authorities would be necessary, the document notes.

How we can stop false positive matches by improving commercially available algorithms.

Continuously improve
your screening process

Use whitelists to your
advantage





Conclusion

- According to my analysis Facial Recognition have both pros and cons. Until it is used under regulations it acts as pro and beyond the regulations it acts as a con.
- Its major pros are that it can be used in Law Enforcement Agencies to uncover criminals, used at airports for security checks, some people also like the auto tagging feature on facebook, etc.

CONS

- Coming towards the cons it acts as a major threat to individual's privacy,
- Isn't as effective at identifying people of color and women as it is white males. One reason for this is the data set the algorithms are trained on is not as robust for people of color and women.
- there are issues that need to be resolved that can throw off the technology when a person changes appearance or the camera angle isn't quite right.
- Potential downside is the storage of sensitive personal data and the challenges that come with it.