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Facial Recognition
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Facial recognition systems work different but often built on algorithms:

Detection (process of finding a face in an image), Analysis “is the step that maps faces -often by measuring the distance between the eyes, shape of the chin, and distance between the nose and mouth -and then converts that into a string of numbers or points, called a “faceprint.”

Recognition “is the attempt to confirm the identity of a person in a photo.” This process is used for verification.

Uses:

Authentication

Assistive Technology for visually impaired

Social Media photo tagging

Photo album management

Find lost pets

Law enforcement surveillance

Forensics

Airport passenger screening

Employment screening

Housing screening

Medical Diagnosis

Issues:

Targeted surveillance and discrimination

BLM protest surveillance

China searching for Uyghur ethnic minorities

Crime surveillance in Black neighborhoods

Undocumented immigrants/ICE

Misidentification leads to false arrests

FR much less accurate for PoC and women

Perpetuates existing human bias

Pinpoints PoC as likely criminals

Lack of consent

Threatens basic rights such as freedom of speech, protest

Sources:

<https://www.nytimes.com/wirecutter/blog/how-facial-recognition-works/>

<https://www.facefirst.com/blog/amazing-uses-for-face-recognition-facial-recognition-use-cases/>

<https://www.nature.com/articles/d41586-020-03187-3>

<https://www.technologyreview.com/2021/04/14/1022676/robert-williams-facial-recognition-lawsuit-aclu-detroit-police/amp/>

<https://www.aclu.org/blog/privacy-technology/surveillance-technologies/amazons-face-recognition-falsely-matched-28>

<https://www.theguardian.com/technology/2018/jul/07/artificial-intelligence-can-tell-your-sexuality-politics-surveillance-paul-lewis>

<https://www.nytimes.com/2019/04/14/technology/china-surveillance-artificial-intelligence-racial-profiling.html>