NO PREP

Facial Recognition and Wrongful Arrests

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Name: Period: Date:

Facial Recognition and Wrongful Arrests

A Technology That Moved Faster Than Its Accuracy

Facial recognition technology uses AI to compare photographs of faces and determine whether they match. Law enforcement agencies have been using it to identify suspects in crimes, locate missing persons, and match surveillance footage against databases of known individuals. The technology can process thousands of faces in seconds — a task that would take human investigators days or weeks. Given these capabilities, police

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Robert Williams: Arrested for a Crime He Did Not Commit

In January 2020, Robert Williams, a Black man living in suburban Detroit, Michigan, was arrested in front of his wife and daughters on his front lawn. He had been accused of shoplifting watches from a luxury store in 2018. The evidence against him consisted of surveillance footage, a photograph from a loyalty card database, and a match returned by a facial recognition system used by the Detroit Police Department. The match turned out to be wrong. Williams spent 30 hours in jail before investigators looked more carefully at the evidence. When a detective showed him a photo array, a standard investigative procedure, Williams held the

image next to his face and said, "I hope you don't think all Black men look alike." The detective acknowledged the match was not strong. Williams was released and the case was eventually dropped, but the experience (the arrest, the night in jail, the trauma for his family) was not reversible. Williams later sued the city of Detroit and became the first known case of a wrongful arrest attributed to a faulty facial recognition match in the United States.

Alonzo Sawyer and Michael Oliver: The Pattern Continues

Robert Williams was not the only one. In 2020, Alonzo Sawyer, a Black man in Baltimore, Maryland, was arrested based on a facial recognition match for a robbery he did not commit. He spent ten days in jail before investigators concluded the match was incorrect. In 2019, Michael Oliver, a Black man in Michigan, was arrested and charged with a felony after a facial recognition system erroneously identified him as a suspect in a road rage incident. Oliver's case took months to resolve, during which he lost his job. A fourth case involved Nijeer Parks, a Black man in New Jersey who was arrested in 2019 and spent ten days in jail based on a false facial recognition match. All four documented wrongful arrest cases attributed to facial recognition errors in the United States involved Black men. This is not a coincidence. It reflects the documented accuracy gap in these systems: they are significantly less accurate on darker-skinned faces, which means that when false positive matches occur, they disproportionately affect Black individuals. Critics argue that deploying a technology with known accuracy disparities in life-altering law enforcement decisions without adequate safeguards is itself a form of institutional discrimination.

How Accurate Are These Systems, Really?

The NIST study, which tested 189 facial recognition algorithms from 99 different developers, found enormous variation in accuracy. Some algorithms were highly accurate across all demographic groups. Others showed dramatic gaps. The worst-performing algorithms on darker-skinned women had false positive rates between 10 and 100 times higher than on lighter-skinned men. These are not small differences — they are the kind of differences that determine whether an innocent person gets arrested. A critical distinction that many police departments overlook is the difference between a "hit" and a "match." Facial recognition software returns a list of potential matches ranked by probability — it does not deliver certainty. The

correct procedure is to treat a facial recognition result as a lead that must be verified through traditional investigative methods, not as evidence of guilt. In several of the wrongful arrest cases, investigators either skipped additional verification steps or weighted the software output more heavily than they should have.

Bans, Moratoriums, and the Policy Debate

The documented wrongful arrests and the ongoing accuracy concerns have driven a significant policy debate about whether facial recognition should be used in law enforcement at all. Several major cities, including San Francisco (2019), Boston (2020), and Portland, Oregon (2020), banned government use of facial recognition technology. Detroit, where Robert Williams was arrested, placed restrictions on how the technology could be used and required additional verification steps. The European Union's AI Act classifies real-time facial recognition by law enforcement in public spaces as generally prohibited, with narrow exceptions. Supporters of facial recognition in law enforcement argue that the technology, when used properly with appropriate verification, can help solve violent crimes and locate missing children — and that banning it entirely discards genuine benefits. Critics respond that "used properly" is not a realistic standard when accountability is weak, that the technology's accuracy gaps make it fundamentally unsuited for use in a system where wrong answers can destroy lives, and that communities most harmed by the accuracy failures are also the communities with the least power to challenge the technology's use. The broader stakes of facial recognition accuracy disparities extend beyond individual wrongful arrests. When members of a particular community know that surveillance technology routinely misidentifies people who look like them, and that misidentification can lead to arrest, the chilling effect on public behavior is significant. People may avoid public spaces, demonstrations, or gatherings where cameras are deployed. They may be less willing to speak with police even as witnesses to crimes, knowing that proximity to a crime scene and presence in a law enforcement database is a risk. Civil rights researchers have documented that communities facing intensive algorithmic surveillance report heightened stress, reduced civic participation, and damaged relationships with public institutions. These effects are not abstract: they are measurable changes in how people move through the world and engage with public life, imposed by a technology whose accuracy

problems fall disproportionately on the communities most exposed to it. These findings remain deeply troubling and unresolved.

Key Information: Facial Recognition and Law Enforcement

Detail	Information
Technology function	Compares photographs of faces to find matches in databases
Key accuracy finding (NIST)	False positive rates up to 100x higher for Black women than white men
Robert Williams case (2020)	Wrongful arrest in Detroit; held 30 hours; first documented U.S. case
Other documented cases	Alonzo Sawyer (Baltimore), Michael Oliver (Michigan), Nijeer Parks (NJ)
Common factor in all cases	All four wrongfully arrested individuals were Black men
"Hit" vs. "match" distinction	Software returns probability list, not certainty; requires additional verification
Cities that banned the tech	San Francisco (2019), Boston (2020), Portland OR (2020)
EU AI Act stance	Bans real-time facial recognition in public spaces by law enforcement with narrow exceptions

Case Study: Danielle's Brother

Danielle is 19 years old. Her brother Marcus, 27, was arrested six months ago based on a facial recognition match from a convenience store robbery. He was held for eight days before his public defender was able to obtain the store's actual security footage and demonstrate that the suspect in the video was several inches shorter than Marcus and had a visible tattoo on his left hand that Marcus does not have. Marcus lost his warehouse job because he missed too many shifts during the eight days. His employer does not allow extended absences regardless of the reason. He is now trying to get the arrest record expunged, which costs money they do not have. "He did everything right," Danielle tells a community organizer at a meeting about the city's surveillance policies. "He had a job. He had an apartment. And one bad algorithm took all of that." She pauses. "And the city still uses the software. They just said they'd be more careful next time."

1. Marcus's case illustrates a specific failure in how the facial recognition system was used. Based on the reading, what step should investigators have taken that apparently did not happen?

2. Using Marcus and Danielle's situation and evidence from the reading, explain why critics argue that communities most harmed by facial recognition errors are also the least able to challenge the technology.

Multiple Choice

1. What did the NIST study find about false positive rates in facial recognition systems?

a) Some algorithms had false positive rates up to 100 times higher for Black women than white men

b) The technology was less accurate for elderly individuals than for any other group

c) All commercial systems performed equally across demographic groups

d) False positive rates were highest in rural areas, where the camera equipment is of lower quality

2. What does the reading say was common to all four documented wrongful arrest cases attributed to facial recognition in the United States?

a) All four cases occurred in the same city over two years

b) All four individuals were eventually convicted of a different crime

c) All four cases involved robbery charges at retail stores

d) All four individuals arrested were Black men

3. What is the key distinction the reading makes between a facial recognition "hit" and a confirmed "match"?

a) A hit can only be used in civil cases while a match is used in criminal proceedings

b) A hit is legally admissible as evidence; a match is not

c) A hit is a probability ranking that requires verification, not a confirmation of guilt

d) A match comes from older AI systems while a hit comes from newer facial recognition tools

Matching

Write the letter of the correct definition on the line next to each term.

Term	Definition
1. ___ False positive	A) When an AI system performs significantly better for some groups than others
2. ___ NIST	B) First documented U.S. victim of a wrongful arrest caused by a faulty facial recognition match
3. ___ Robert Williams	C) A temporary suspension or ban on the use of a technology or practice
4. ___ Moratorium	D) An incorrect identification in which an innocent person is matched to a suspect
5. ___ Disparate accuracy	E) U.S. agency that tested 189 facial recognition algorithms and found major accuracy gaps

Fill-in-the-Blank

1. Robert Williams spent 30 hours in _____ before investigators looked more carefully at the evidence against him.

2. San Francisco banned government use of facial recognition technology in _____ .

3. The EU AI Act classifies real-time facial recognition by law enforcement in public spaces as generally _____ .

Short Answer

Answer each question in 2-4 complete sentences.

1. Why does the documented accuracy gap in facial recognition systems disproportionately harm Black individuals specifically, according to the reading?

2. Describe what went wrong procedurally in several of the wrongful arrest cases, according to the reading.

3. Present one argument in favor of law enforcement using facial recognition and one argument against it, drawing from the reading.