Policing Facial Recognition Technology (FRT): Emerging Vulnerabilities for Minority Groups

- Assistant Professor Elizabeth Farries
- **Director, MSc and Professional Certificate Digital Policy programmes**
- Co-Director, UCD Centre for Digital Policy
- Senior Fellow, International Network of Civil Liberties Organizations (INCLO)

Twitter: @e_farries | #UCDDigitalPolicy



James Lawless (Kildare North, Fianna Fail)

Link to this: Individually | In context | Oireachtas source

39. To ask the Tánaiste and Minister for Justice and Equality the status of plans to roll out facial recognition technology for use in policing; and if she will make a statement on the matter. [35658/22]

Helen McEntee (Meath East, Fine Gael)

Link to this: Individually | In context | Oireachtas source

The Government approved the publication of the Garda Síochána (Recording Devices) Bill, previously called the Digital Recordings Bill, on 21 June. The text of the Bill will be available shortly. This important Bill makes provision for Garda powers to use modern digital technology including body worn cameras, automatic number plate recognition (ANPR) and CCTV.

I also received Government approval to introduce amendments to the Bill at committee stage providing for the use of facial recognition technology. The amendments will set out how the new provisions will operate in practice. The exact parameters of these amendments have not been decided on and officials from my Department are consulting with relevant stakeholders and looking at international best practice.

I would like to assure the Deputy that safeguards will be built into the legislation and there will be full compliance with GDPR and the Data Protection Act of 2018. These safeguards will include a full human rights and data protection impact assessment.

It is my intention to return to Government for approval of any proposed amendments in the autumn.

Written answers
Tuesday, 5 July 2022

Department of Justice and Equality
An Garda Síochána

Today

Policing FRT

- benefits
- risks
- Ireland's plans

Class Questions

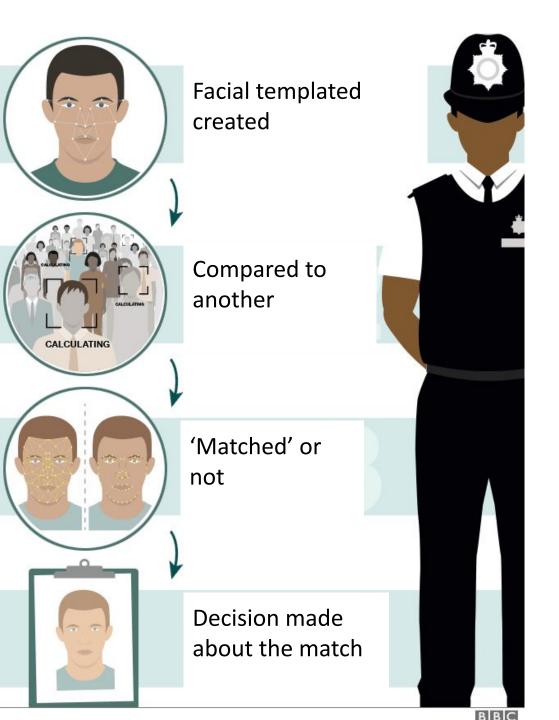
What is Facial Recognition Technology (FRT)?

Class Questions

What are the benefits of (FRT)?

Class Questions

What are the risks of (FRT)?



Policing FRT Operational assumptions

Explaining tech to non tech people

FRT differs from cameras - requiring different analysis

- Biometric data. Our image constitutes one of the key attributes of our personality
- FRT maps biometric data distinguishing us from others
- 'Live', 'real time' or 'public FRT' indiscriminately scans images of everyone whose walks past camera

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Ideological constructs:

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- Tech is neutral
- Tech solutionism
- Tech is 'smart'

Policing FRT: Ideology versus evidence The evidence reveals a few risks...

- Accuracy (or lack thereof)
- Bias (in data sets and deployment)
- Mass Surveillance (and its chilling effects)
- Discriminatory policing (and protest)

We have lots of evidence in peer reviewed literatures, policy papers, industry white papers, parliamentary transcripts, media comments and blogs.

Risk no 1: Accuracy

Fussy, P. & Murray, D. (2019)

- Face recognition performance on static images declines when confronted with variables including age OR gender OR ethnicity
- This effect is amplified when ALL three variables are combined
- FRT therefore performs less well if you are young, and also a woman, and most in particularly if you are a young black woman

See also: Gebru (2018) Gender Shades, US NIST (2019)

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1 Accuracy: False Positives and Negatives





Risk no 2: Bias in data sets and deployment

What is the difference between bias and accuracy?

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What is the difference between bias and accuracy?

Data sets are not value-neutral but reflect dominant perspectives



Ruha Benjamin, Race After Technology: Abolitionist Tools for the New Jim Code (2018)

- Al carries within it biases that can have unintended detrimental impact on certain communities or groups.
- Race and racism are encoded into AI and contribute to segregation much like US Jim Crow laws.
- This despite data sets and AI purporting to be objective.

Nature of Risk 2: Bias in the data

Benjamin (2019)

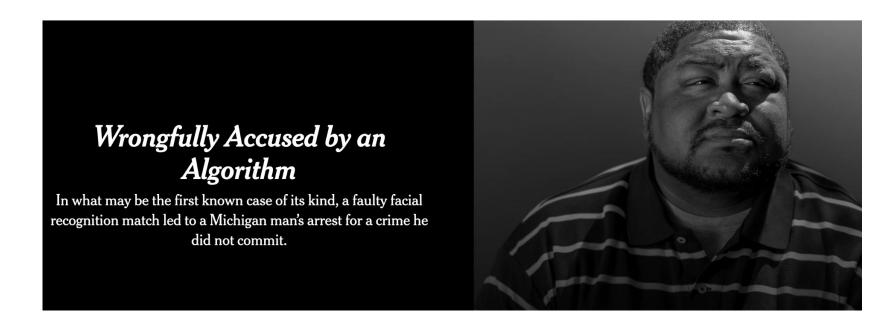
- data sets are not value-neutral but reflect dominant perspectives
- datasets allow AI/ML to create models which reproduce and exacerbate existing inequalities
- ACLU tested Amazon's FRT software and found it did not work



Nature of Risk 2: Bias in deployment

Ada Lovelace (2022)

 FRT that clears data set bias in lab settings, can still reintroduce bias through deployment



Manitoba

First Nations man wants apology after being flagged as shoplifter, asked to leave Canadian Tire store













Company will not say if it is using facial recognition technology to identify shoplifters at Grant Park store



Austin Grabish · CBC News · Posted: Oct 19, 2022 5:00 AM CT | Last Updated: October 19

SCOPE CREEP Bias in deployment beyond policing contexts



Risk no 3. Mass surveillance as a norm

Mass surveillance is indiscriminate surveillance

- **Stanley (2022)**: FRT has the ability to scan large amounts of publicly captured visual data so it can draw powerful inferences about people,
- Guthrie Ferguson (2021): Such surveillance can create a broad mosaic of a person's activities, including their interests, movements, employment, religious practices, health issues, and social relationships.

Unchecked FRT can draw portrait of you that is far more detailed than the characteristics of your face alone

Mass surveillance consequence: Chilling Effects

- Behavioural changes. Surveillance technology threatens to have a chilling effect on behaviour people behave differently when they know they are being watched. Stoycheff (2016)
- Democratic threats. The reluctance to move freely due to concerns about being perpetually watched can change the fabric of our society and the way people operate within it. Benjamin (2020)
- Limitations on fundamental rights. Freedoms of assembly and association, freedom of expression, privacy, data protection etc ETC!

FRT risks to rights to equal treatment

Article 21 - Non-discrimination

FRT risks to rights to equal treatment

Article 21 - Non-discrimination

- 1. Any discrimination based on any ground such as sex, race, colour, ethnic or social origin, genetic features, language, religion or belief, political or any other opinion, membership of a national minority, property, birth, disability, age or sexual orientation shall be prohibited.
 - 2. Within the scope of application of the Treaties and without prejudice to any of their specific provisions, any discrimination on grounds of nationality shall be prohibited.



Ruha Benjamin: Race After Technology: Abolitionist Tools for the New Jim Code (2018)

- Tech speeds up offline forms of racial exclusion while appearing 'colour blind' – ie appearing neutral and benevolent
- **Discriminatory design** and application amplifies existing racisms replicating social divisions.
- FRT presents as a new form of discrimination



Policing Discrimination: Liberty UK's example

BERTY

Observed possibly discriminatory behavior by UK police

- observed UK police FRT trials
- observed false positive matches (built from inadequate data sets)
- observed police detain individual even when the tech failed

Personal Communication, 2019

BERTY

FRT inaccuracy can lead to amplified policing discrimination

- Bias: datasets, deployment
- Also: People experience police stops differently
- Also: Choice of FRT deployment locations
- Also: Were the data sets legal? Police can't just collect information about people arbitrarily.

(Re)Framing the issue in Ireland: Policing FRT

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Alternative framing:

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Alternative framing: Policing resources directed to technologies like FRT create new vulnerabilities for minoritised populations

Resource misdirections. Into flawed technologies like FRT Discrimation impacts. In the data sets, development, and use

Back to Ireland: Policing FRT - govt moving to put in a legal framework

Minister's framing: Policing resources are limited and crime management can be assisted by new forms of technology like FRT.

Experts' response: It's too dangerous. Our open letter to Irish Times from experts at 7 universities and 13 NGOs in Ireland

Letters

Garda use of facial recognition technologies unnecessary and disproportionate

It may have significant chilling effects, altering how people use public and online spaces

Thu Jun 2 2022 - 00:11







Sir, - The Minister for Justice plans to expand the Garda's surveillance powers with policing facial recognition technologies (FRT). While some believe that using FRT may help make us safer, the undersigned experts from seven universities and 12 NGOs in Ireland know the risks are too significant.

LATEST STORIES >

NFL: Vonnie B'Vsean Miller the difference between and Chiefs

Bank of America tops loan revenue estimates an interest rates

Regency hotel shooting: Jonathan Dowdall jailed years for role in attack

Experts in Ireland said (Open IT letter):

- Policing FRT is used as a form of mass surveillance that will enable the identification and tracking of individuals without warranted suspicion. It has the ability to scan large amounts of publicly captured visual data so it can draw powerful inferences about people, the vast majority of whom would be of no interest whatsoever to the gardaí.
- Even though this technology is available for policing, it **does not mean we should use or <u>trust it</u>**. It is established by independent researchers to be <u>biased and discriminatory</u>, particularly for anyone who is not a white man.
- It risks increasing the problem of <u>over-policing</u> in areas with marginalised groups, leading to disproportionate incrimination, racial and minority ethnic profiling, and <u>derailing of people's lives</u>.

Meeting with Dept of Justice (June 2022)

Department conclusion. 'We will proceed with prior policing FRT plans'

Next step. Our letter to Cabinet members



Cabinet letter outcome: More promising

Premium 🗑

Helen McEntee faces Cabinet backlash over gardaí plans

for facial recognition



Justice Minister Helen McEntee. Photo: Colin Keegan, Collins Dublin.

- Concerns were expressed by Green Party ministers and Health Minister
- Cited a letter ... which stated: "FRT has been established by independent researchers to be biased and discriminatory"
- "We have asked that the minister would engage with the Data Protection Commissioner and experts in this area and present a paper to Cabinet before the committee stage amendments are introduced."

An unexpected intervention...

PALAIS DES NATIONS • 1211 GENEVA 10, SWITZERLAND

Mandates of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression; the Special Rapporteur on the rights to freedom of peaceful assembly and of association; the Special Rapporteur on the right to privacy and the Special Rapporteur on the promotion and protection of human rights and fundamental freedoms while countering terrorism

Ref.: OL IRL 3/2022

(Please use this reference in your reply)

30 September 2022

Excellency,

UN letter

- 1. No adequate pre-legislative scrutiny of these plans.
- 2. The Government is attempting to push through a law on FRT when the European Union (EU)is already discussing the same issues.
- 3. Third, there are human rights concerns around the disproportionate impact of FRT on the lives of people when using recognition to help "identify suspects in a crowd".

The Irish government response:

the Irish judiciary. I understand and share the concerns expressed on the use of FRT for 'real time' analysis in such contexts. However, I can reassure that no such power for law enforcement to use FRT in such a manner is being contemplated by Ireland. Indiscriminate mass surveillance using FRT, or profiling that could result in discrimination will be prohibited. Further, any individual who believes their rights have been interfered with will have access to the Ombudsman Commission – the independent statutory body for police complaints.

An adequate response?

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MoJ earlier: "there will be provision for gardaí to use the technology in conjunction with live camera footage rather than just retrospectively. This would allow the force to track people in real time as they move about in public"

Response to the UN: will introduce both retrospective and live facial recognition facilities while also saying "there are no proposals for the use of FRT for 'real time' analysis.

What's next for policing FRT in Ireland

INDICATIVE BUSINESS FOR WEEK BEGINNING 15 NOVEMBER 2022

- Garda Síochána (Recording Devices) Bill 2022 (Second Stage)
- Oil Emergency Contingency and Transfer of Renewable Transport Fuels Functions Bill
 2022 (Second Stage)
- Credit Guarantee (Amendment) Bill 2022 (Committee and remaining Stages)
- Statements for Science Week
- Post-European Council Statements

Yesterday's invite...

well. Further to our previous correspondence in June in relation to the Minister's announcement of her intention to special category of data, we wish to invite you to a briefing on the proposed use of FRT by An Garda Síochána on the 1. If you wish to accept, you might confirm who will be in attendance and if the time and date will suit. If there is any issue has let me know and we can try to arrange an alternative. We will forward zoom details if you accept the invitation.

No indication they've heard any expert complaints...

Ireland's opportunity

- resist rolling out policing FRT in the name of tech solutionism given its established risks in relation to accuracy, bias, and mass surveillance
- retain the character of a democratic country who favours rights and rule of law and not follow the trends of countries with less democratic characteristics
- draw a red line against use of this tech as other jurisdictions have around the world

Ireland's opportunity

Europe edges closer to a ban on facial recognition

Efforts to outlaw the use of AI cameras to scan and identify people's fac gaining traction.

San Francisco Bans Facial Recognition Technology

Cambridge City Council Votes to Ban
Facial Recognition Technology moratorium on the purchase or use of any "biometric identifying technology"

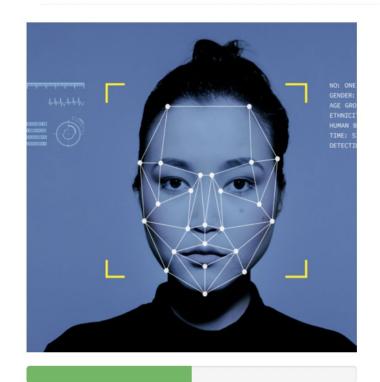
ARGENTINA: BUENOS AIRES' FACIAL RECOGNITION SYSTEM SUSPENDED

Springfield City Council passes facial recognition moratorium

I Do Not Consent to Facial **Recognition Technology**

#IDoNotConsent

Irish Council for Civil Liberties Facial Recognition Technology poses extreme risks to our rights - tell the Minister you don't consent!



1006 / 2000 signatures

Dear Minister McEntee,

I do not consent to being tracked or identified by Facial Recognition Technology.

This tech poses an extreme risk to my rights, including privacy, protest, association and equality.

I am deeply concerned about An Garda Síochána's track record with keeping data safe

Thank you!

Twitter: @e_farries | #UCDDigitalPolicy