

Thermal imaging

Low Tech Canvas Against High Tech Surveillance

Use our **wearable** guides to become a digital explorer of your city. See your neighborhood in a new light while exploring issues around facial recognition, voice identification, gait recognition, thermal imaging, and Wi-Fi tracking.

Be careful: becoming an explorer is exciting but at times jarring. You might learn more about your world than you want. Now take this canvas to the streets, bring your curiosity, watch, listen, and play. Try out some of our tactics and strategies to resist data collection in public space and co-design your neighborhood.

Getting a lay of the land

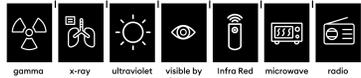
Thermal imaging is a relatively new sighting in urban areas and might not yet be used in your habitat. In light of COVID-19 technology deployment is changing rapidly so it is recommended to include this knowledge and skills in your smart technology survival toolbox.



1. How computers see in the dark

1. All things, from plants and people to buildings and machines, produce a small form of radiation.
2. Thermal imaging cameras record the environment.
3. This radiation is captured in what is called the long-infrared range of the electromagnetic spectrum. Thermal imaging makes it possible to see people in the dark.

Since the first outbreak of SARS it has been used at airports to make 'visible' the 'invisible', monitoring for the arrival of sick people.



4. An images of that radiation is known as a 'thermogram'. This works particularly well on warm bodies such as people and animals, as these clearly stand out against cooler backgrounds.

2. Did you know its used too ...

- Test if you are in love. When you are in love your temperature could increase by 2 degrees.
- Spot illegal indoor cannabis farms in an urban areas.
- At airports to see if travelers coming into the country have a fever.
- For building inspection, maintenance, and optimization.
- In the US military to quickly take the temperature of soldiers going into training.
- For drone warfare, when detecting human movement at a target location.

Navigating privacy in public spaces

There are a number of ways to decrease your thermo footprint. Tactics range from putting a fishbowl on your head to hiding behind a rock. While these tactics might be effective, they are not so practical. Explore our more practical tactics.

5. Be proactive

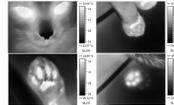
Since the start of the COVID-19 pandemic you need to register your contact information almost everywhere and answer health questions when entering a cafe or shop. Your temperature is considered special personal data, i.e. health data, which is protected under the data protection regulation.

According to the Dutch data protection authority, the rules on the clipboards apply to your personal data. Next time you are asked to give data, be proactive and ask how and where they store this, and who has access.

6. Wearable privacy

Instruction: Follow the pattern and cut out a hole in the middle of the canvas.

By putting your head through this hole, your canvas becomes a protective cover that shields your body from unwanted detection and surveillance.



4. Looking through the eye of thermal camera

Go to your app store and install a thermal camera on your phone. We have tried the Night Vision Thermal Camera.

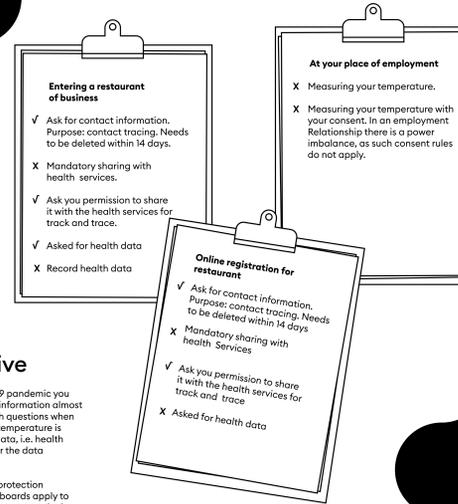
Challenge
Download the app, take your phone and walk around outside to see the thermogram of your neighborhood.

How does it feel to invisibly capture thermal images of people?

Write down here

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.....
.....
.....
.....

Your data in times of crisis ...



7. Practical camouflage tips

Thermal survival techniques range from



Covering your body with a thick wool jumper.



Only going outside in the rain.



Avoid open spaces and skylines by day or night.



Covering your face with COVID-19 face shield.

8. Body temperature check

Employee

Not Allowed!

It is not allowed to measure an employees temperature at work, or any medical data for that sake. This also applied to any third party companies you visit in relation to your work. For example if you deliver goods, products or parcels nor your employer nor the client can ask you for your health data.

What to do when it happens against your consent

- Contact your Works Council (OR) and the data protection officer of your organization.
- If this doesn't help file a complaint with your data protection agency.

Customer

Only allowed when

- You consent AND
- if the temperature is NOT recorded and stored

What to do when it happens against your consent

- Ask what they do with the data
- If it is recorded and stored you can file a complaint with your local data protection agency

9. Be critical

Depending on the COVID-19 crisis level in your country, the government or municipality might scale up or scale down specific measures. Unfortunately there is a strong belief in technology.

Keep your eye out for any mention of emergency legislation and new measures that are being proposed. Not only in the news, but also in the responses of the human and digital rights community in your area.

10. Join a community

The use of thermal imaging is a complex issue. Don't go at it alone, find a community!

Pro spotter tip: Find your local digital rights group or crypto party and join their mailing list or meet ups. Unsure where to find them? Search for 'human rights and thermal imaging' 'NGO + digital rights + your country'

You'll probably find groups like Bits of Freedom, EDRI, Liberty, Ada Lovelace Institute, AI Now, Article 19, La Quadrature du Net, and Data and Society.

Support those fighting for your rights. Donate to your local digital rights or human rights group.

Colophon

Version: Sept 2021 ENG V.04

Produced by

Fieke Jansen, Data Justice Lab in collaboration with designcollective idiotis with support from Designlab Digital City, Amsterdam.

Supported by

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