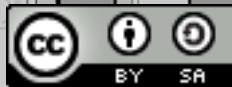
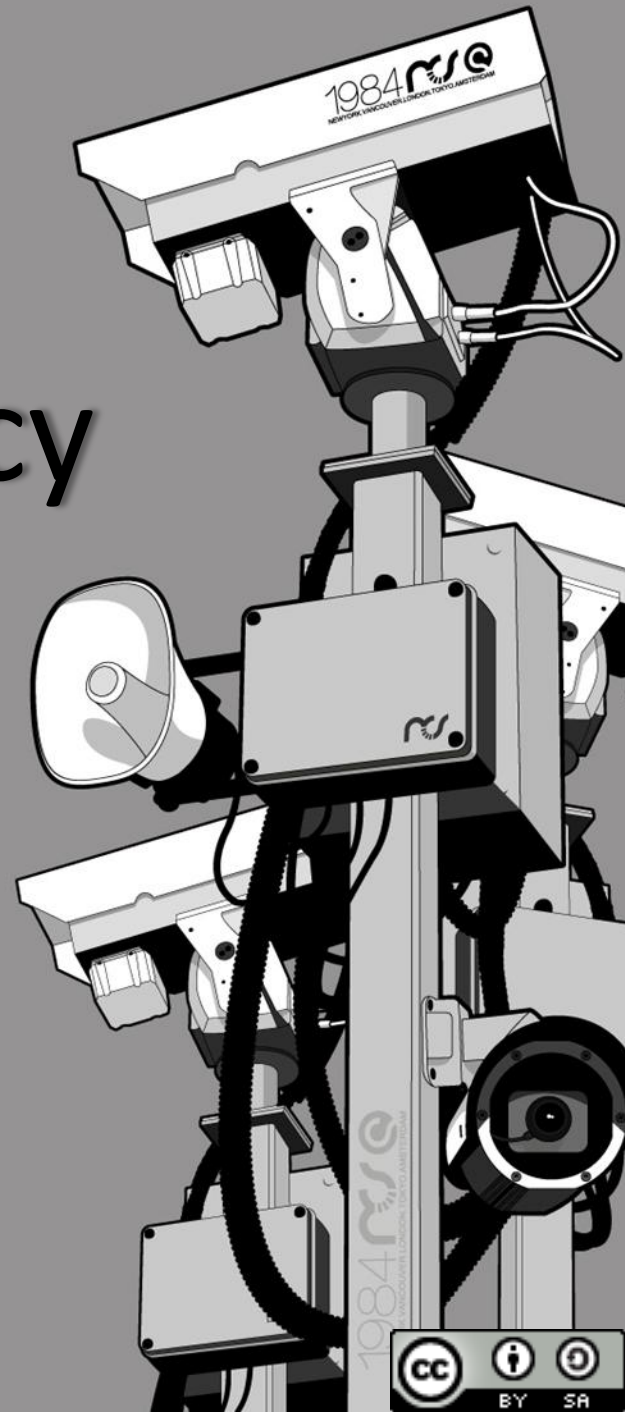


Anonymity & Privacy

“Even if you're paranoid, that doesn't mean they're not watching you”

Amichay P. K.

DC9723, 19.7.2011



about:me

- Amichay Peretz Klopshtock (you actually read it?!)
 - 18
 - Hacker
 - Sci-Fi

- Hitchhiker
- Horseman
- [The New Guard](#)

- Am1chay.p.k@gmail.com

Part 1

A bit about privacy

What is privacy?

- What do you think privacy means?
- What do you think anonymity means?

By the dictionary:

- Privacy: the state of being free from intrusion or disturbance in one's private life or affairs: the right to privacy
- Anonymity is a very important part of privacy

The right to privacy

- Do you have the right to privacy?
 - What that right mean?
- Do you need the right to privacy?
- Do you care about your privacy?

Do you need privacy?

- Who read the book “1984”?



Who should care about privacy?

- People
- Hackers

- Crackers
- Criminals

- And you are most likely two of these...

Do you have privacy?

- Try to Google your name
- Try to Google your email
- Try to Google your phone number

- And this is only Google!

Who have read this?



חיפוש מתקדם
העדפות
כלי שפה

יותר מזל משכל

חיפוש ב-Google

Google.co.il מוגש ב: العربية English

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[פתרונות עסקיים](#)

[פרסום ב-Google](#)

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Do you know your rights?

- Do you read the agreement on every website you sign up to?
- Do you really care?
- Do you know what you **can** do about it?

Part 2

Attack methods

Who is the enemy?

- Companies
 - Microsoft
 - Apple
 - Google
 - Advertisers
- Governments
 - NSA, CIA, FBI
- Criminals
 - Thief's
 - Crackers



Attacker goals:

- To know who are you
- To know where are you
- To know what are you doing
 - To know what websites you visit
 - To know what programs you use
- To know as much as possible about your machine

Ways to track you

- Biometric data
- IP address
- MAC address
- Cookies
- User agent
- Unique web browser
- Social networks
- Your email
- Your (smart)phone
- Your car / Public Transportation

Part 3

General privacy issues

The biometric database

- What?
- Why?
- How?
- Biometric ID or Database?
- When?
- Security?

- “You can’t change your fingerprints...”



Public Transportation

- Who use public transportation?
 - Teenagers / Students
 - Elderly people
 - Poor people
- Rav Kav
- Bus companies can track you
- Anonym cards



Made by AmitRon94

metadata

- Every picture you take contains metadata:

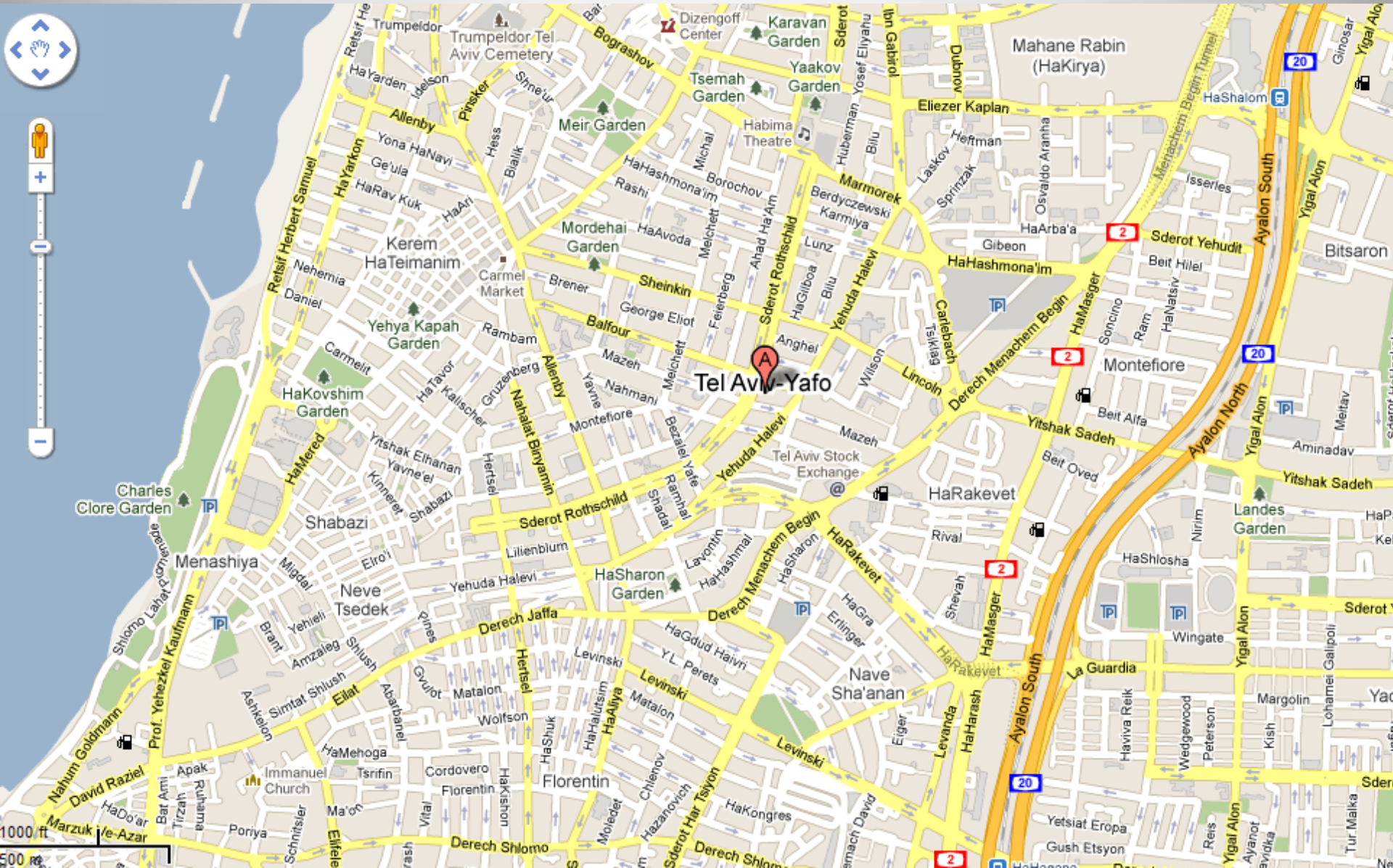
Data	Value
Camera manufacturer	CASIO COMPUTER CO.,LTD.
Camera model	EX-ZS5
Date and time of data generation	20:13, 23 June 2011
Lens focal length	4.7 mm
Exposure time	1/30 sec (0.0333333333333333)

- Every office document contain metadata
- [Remove this details!](#)

Part 4

Web attacks

IP location



HTTP User agent

Mozilla/5.0 (X11; Linux x86_64; rv:2.0.1) Gecko/20100101 Firefox/4.0.1

Mozilla/4.0 (compatible; MSIE 8.0; Windows NT 5.1; Trident/4.0; .NET CLR 2.0.50727; InfoPath.3)

Mozilla/5.0 (Windows; U; Windows NT 5.1; en-US) AppleWebKit/525.13 (KHTML, like Gecko) Chrome/0.A.B.C Safari/525.13

- Your user agent: <http://whatsmyuseragent.com/>
- User agent spoofing [addon for Firefox](#)

HTTP Referrer

- When you open a link, and go from page **A** to page **B** you use an HTTP header, which includes page **A** address
- Page **B** will know where you come from
- You can spoof the HTTP headers you send, or use an anonym referrer: <http://spoofurl.com/>

Cookies

- XSS (Cross-Site Scripting) cookies theft
- XST (Cross-Site Tracing)
- Tracking cookies
- Flash & Silverlight cookies

- Do you need cookies?

email

- You can easily sniff and/or spoof emails
- Use PGP or GPG
- [Send and receive anonymous email](#)
- [Receive email anonymously](#)

Part 5

Proxies

Proxy

- Basically:
 - You ask the proxy for a specific web page
 - The proxy access's the web page
 - Then, the proxy sends you the web page
- This way, the website can only see the Proxies access
- You are invisible

HTTP Web proxy

- Don't provide very good privacy, since you still need to go through one specific server
 - This server can be blocked
- [Hide my ass](#) – Web proxy

SOCKS

- [SOCKS](#) – HTTP proxy protocol
- Invented in 1996
- Developed by Aventail corporation
- This protocol connects the proxy and the website

WinGate

- [Wingate](#) – Windows Proxy
- Published in 1995
- One of the first Proxies for MS Windows

TOR

- The Onion Router
- World wide web of Proxy servers
- Free and open
- Run by the [Electronic Frontier Foundation](https://www.eff.org/) (EFF)
- Hides your IP & User-agent
- Help you to get some privacy



Part 6

Behavior

Panopticlick

- Research made by the EFF shows that over 90% of the web browsers are unique
- “Unique” means that the combination of the user agent, the add-ons information and many more details are very uncommon
- Unique browser will be very easy to track – if you know what you're looking for...
- Example
- <https://panopticlick.eff.org/>

Social networks

- Social networks are the worst place for your information to be in
- Geographical social networks (AKA [foursquare](#))
- If only one of Facebook, Google, Yahoo or Foursquare employees will try, it will be possible for him to know a lot about you.

Publicity

- Don't give talks about privacy!



1984
WAS

NOT

SUPPOSED
TO BE AN
INSTRUCTION
MANUAL

Resources

- The EFF: <https://eff.org/>
- No2Bio: <http://no2bio.org/>
- Panopticlick <https://panopticlick.eff.org/>

• [אני יודע לאן גלשת בקיץ האחרון](#) – אריק פרידמן, [DW](#)

• [רב קו בוויקיפדיה](#)