



UC Berkeley EECS
Lecturer
Gerald Friedland

CS10 The Beauty and Joy of Computing

Lecture #19 Social Implications II

2014-11-10



BERLIN WALL CAME DOWN 25 YEARS AGO!



<http://gizmodo.com/25-years-after-the-wall-fell-berlin-is-a-haven-for-cyb-1655043287>

An Intro to this Lecture





Peer Instruction



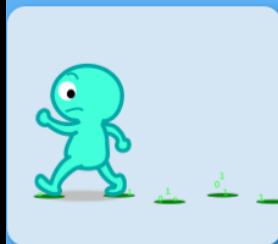
What do you think of Colbert's story?

- a) It's comedy. Totally exaggerated
- b) Some truth
- c) True!
- d) The reality is worse!





10 Principles for Online Privacy



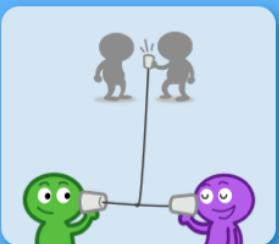
You're leaving footprints



There's no anonymity



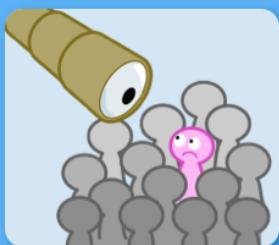
Information is valuable



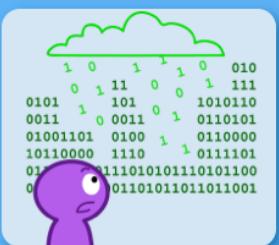
Someone could listen



Sharing releases control



Search is improving



Online is real



Identity isn't guaranteed



You can't escape



Privacy requires work

<http://teachingprivacy.icsi.berkeley.edu>



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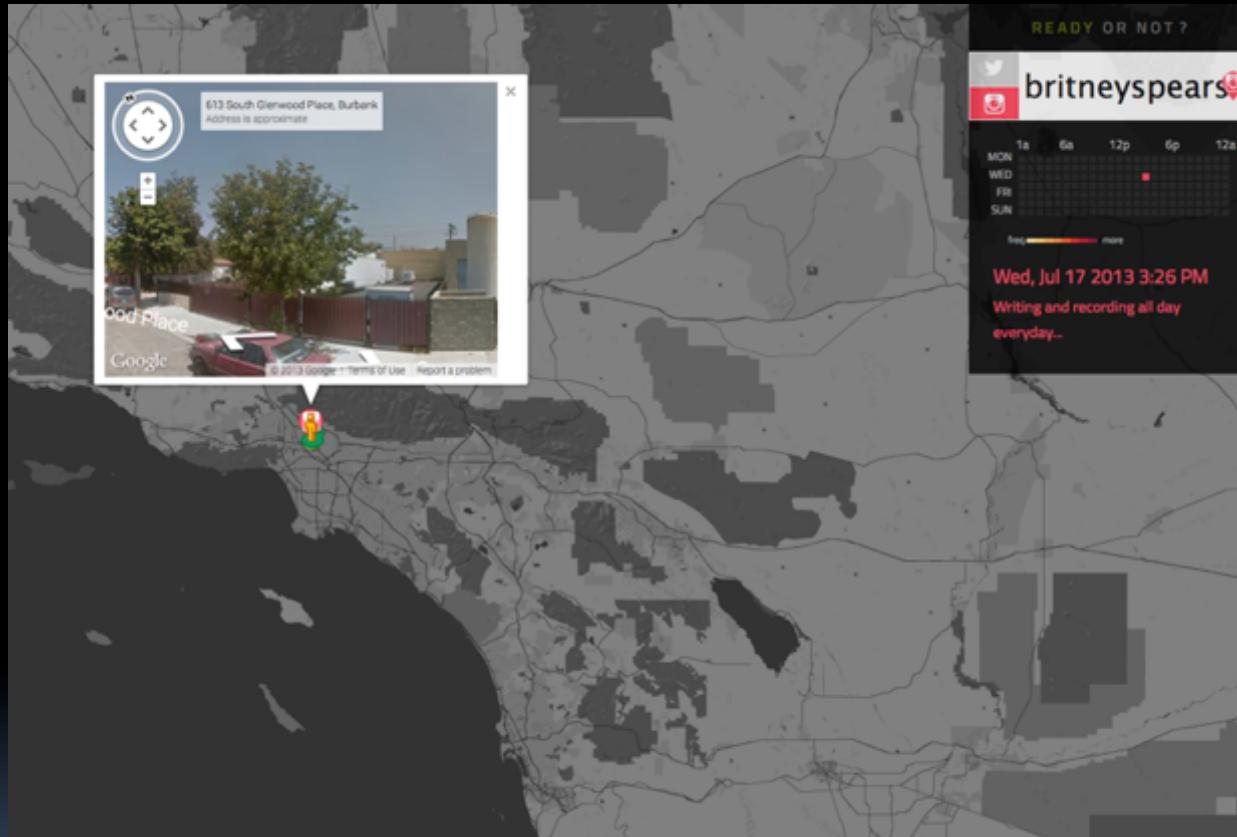
Principle 1

Your information
footprint is
larger than you think!





Principle 1: Example



Ready or Not! ? Privacy App by ICSI



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Principle 1: TODO

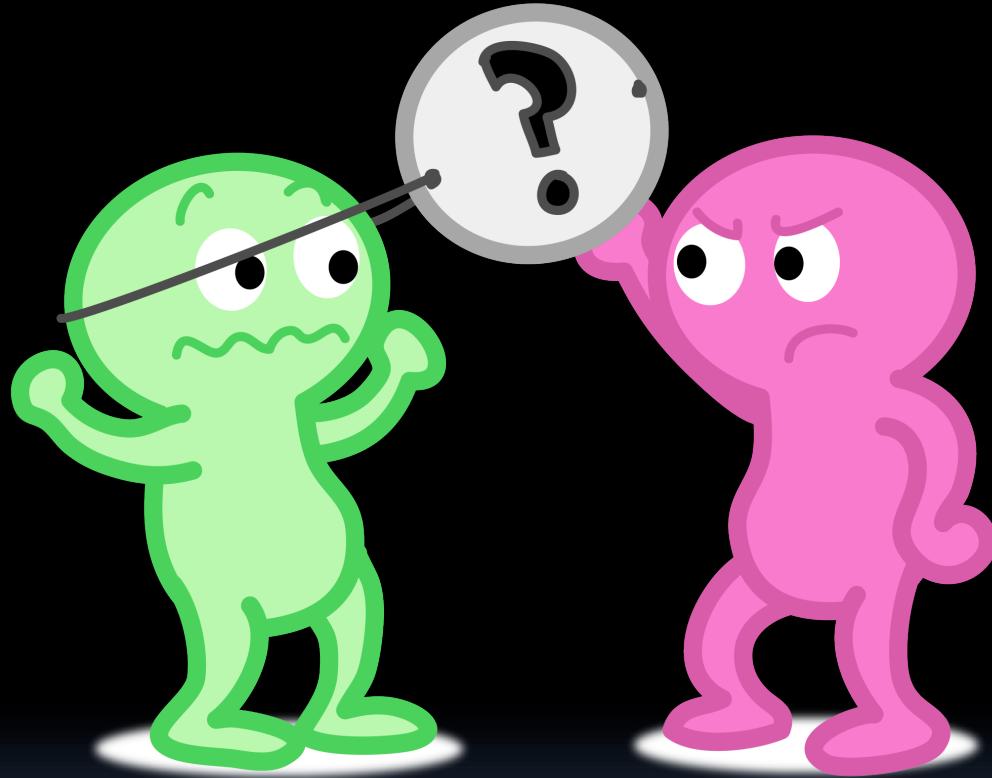
- **Inform yourself!**
- **Know that connection data is **ALWAYS** stored**
- **Check your privacy settings regularly!**

Your information
footprint is
larger than you think!





Principle 2

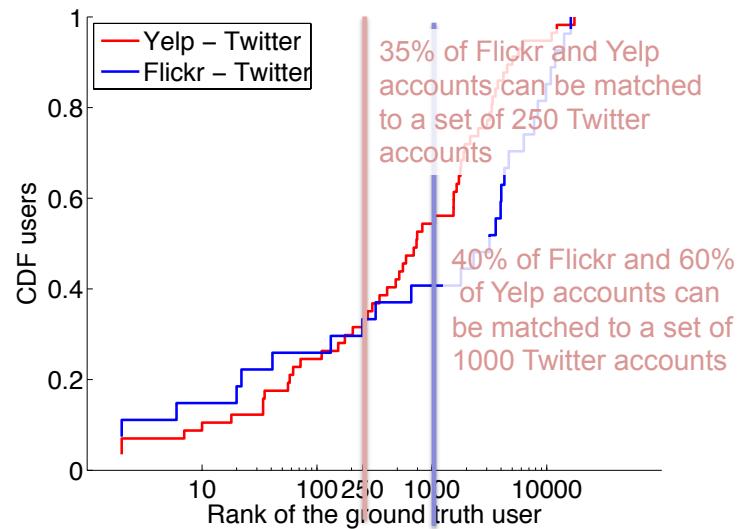


There is no anonymity on the Internet!



Principle 2: Example

Performance of matching with location profile



O. Goga, H. Lei, SHK. Parthasarathi, G. Friedland, R. Sommer, R. Teixeira,
"Exploiting Innocuous Activity for Correlating Users Across Sites", World Wide
Web Conference (WWW), May 2013.





Principle 2: TODO

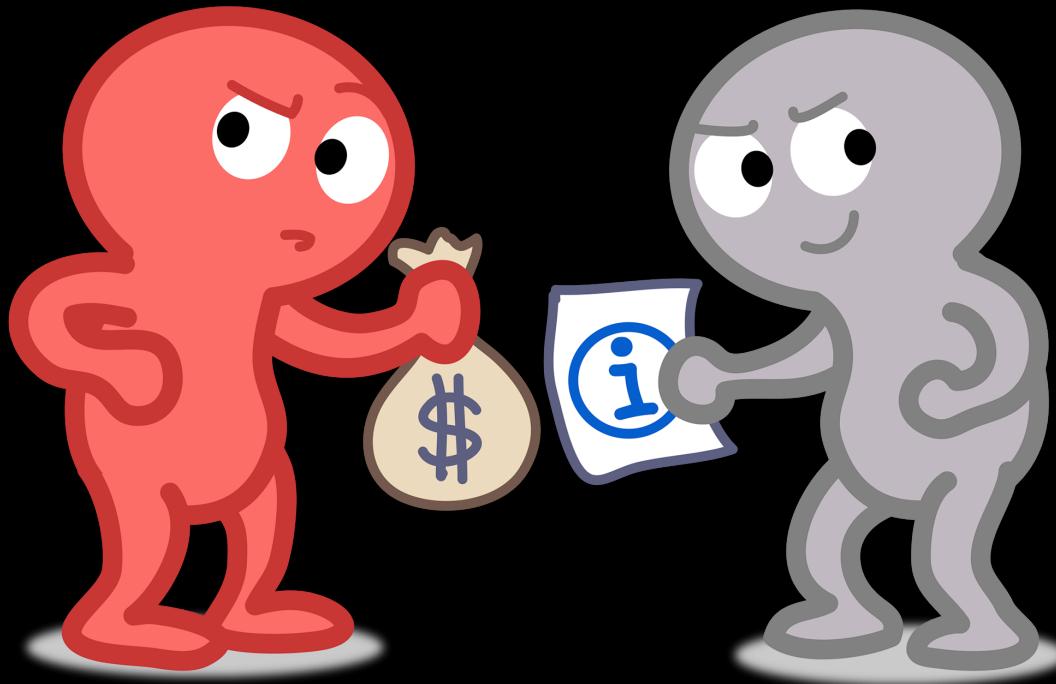
- Constantly be aware nothing is anonymous, even when claimed by website.
- Don't do anything you wouldn't do in public!

There is no anonymity on the Internet!





Principle 3



Information about you on the Internet will be used by somebody in their interest – including against you





Principle 3: Examples



[https://www.youtube.com/watch?
v=bqWuiioPHhz0](https://www.youtube.com/watch?v=bqWuiioPHhz0)



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Principle 3: TODO

- Only share what you have to.
- If you are not sure how the information is used:
Don't share it!
- Check privacy policies: Opt out if you can!

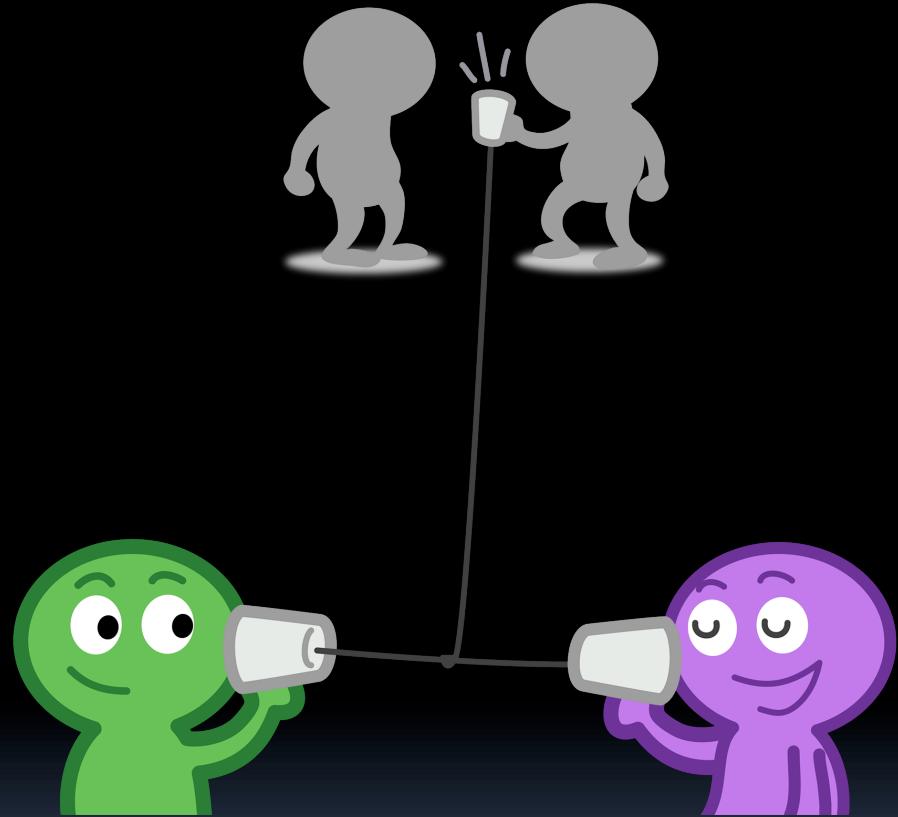
Information about you on the Internet will be used by somebody in their interest – including against

you





Principle 4



Communication over a network, unless
strongly encrypted is never just
between two parties





Peer Instruction



Which of the following technology help with that principle?

- a) Firewalls
- b) https
- c) Anonymity Proxy (like Tor)
- d) Cookie blocker
- e) Routers





Principle 4: TODO

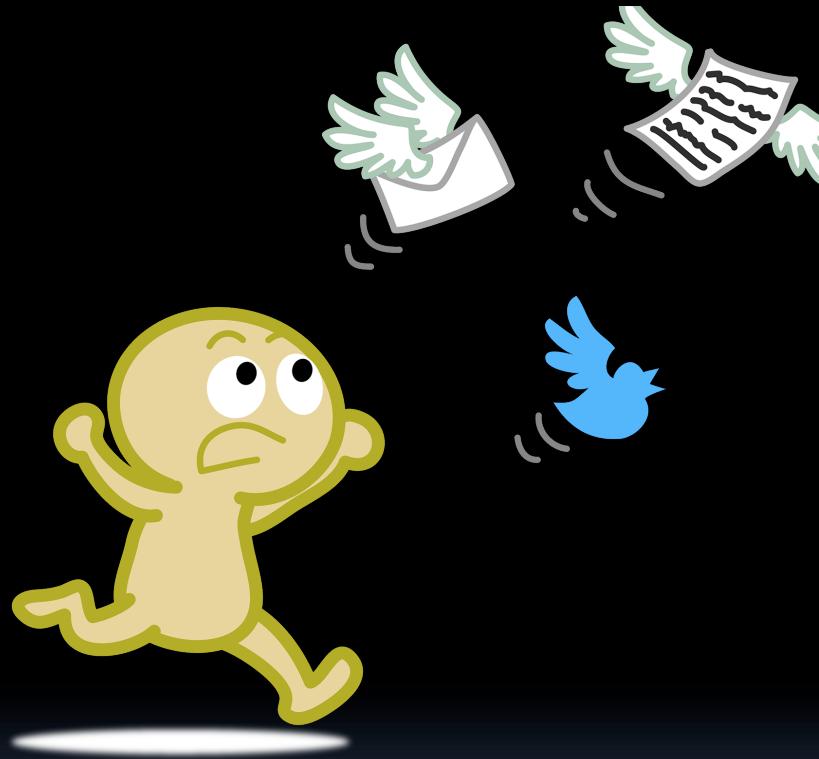
- Use strong passwords, keep them private.
- Computers are fast enough: Use encryption whenever you can!
- Assume it's public if it's not encrypted.

Communication over a network, unless
strongly encrypted is never just
between two parties





Principle 5

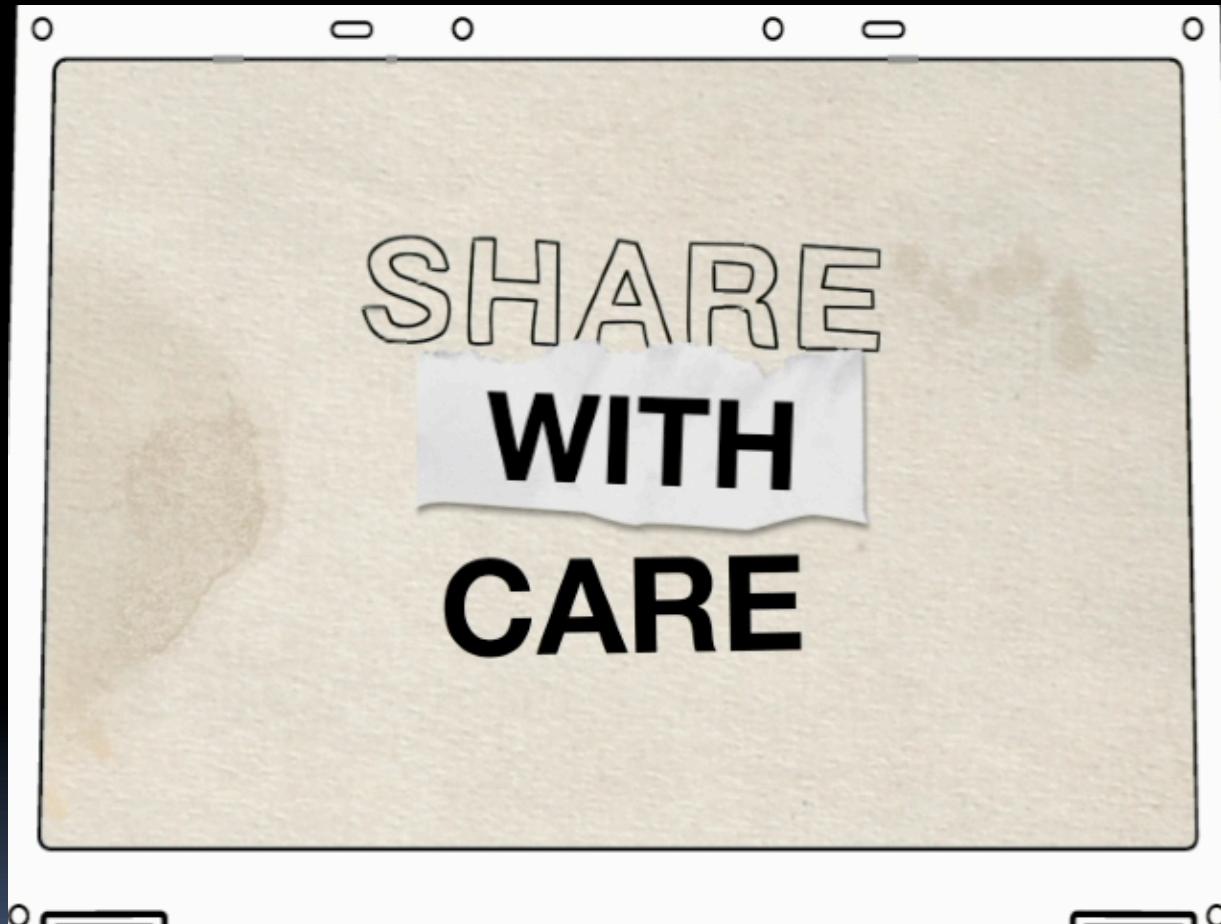


Sharing information over a network
means you give up control over that
information – forever





Principle 5: TODO

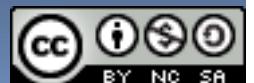


[http://www.onguardonline.gov/media/
video-0004-share-care](http://www.onguardonline.gov/media/video-0004-share-care)



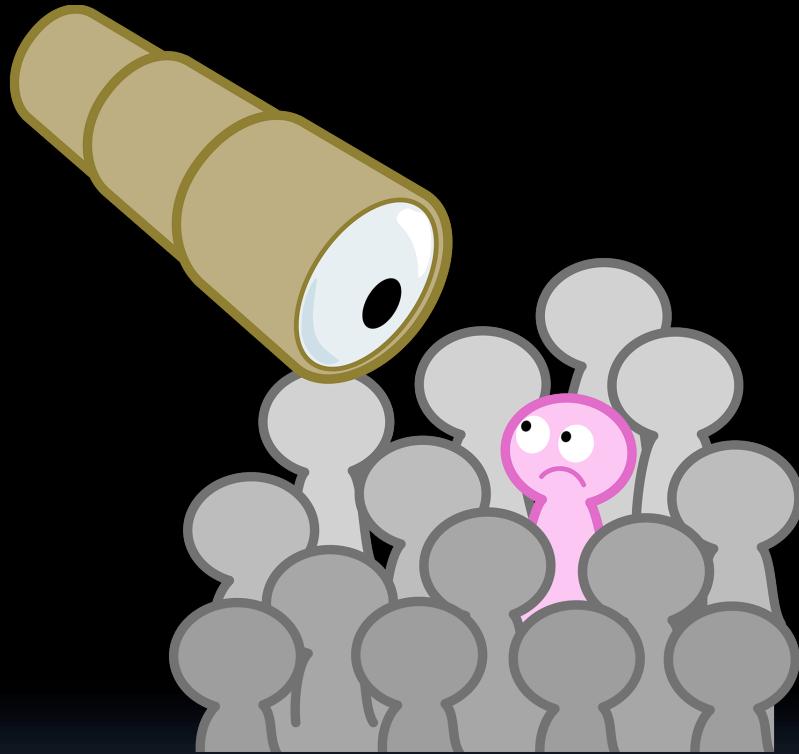
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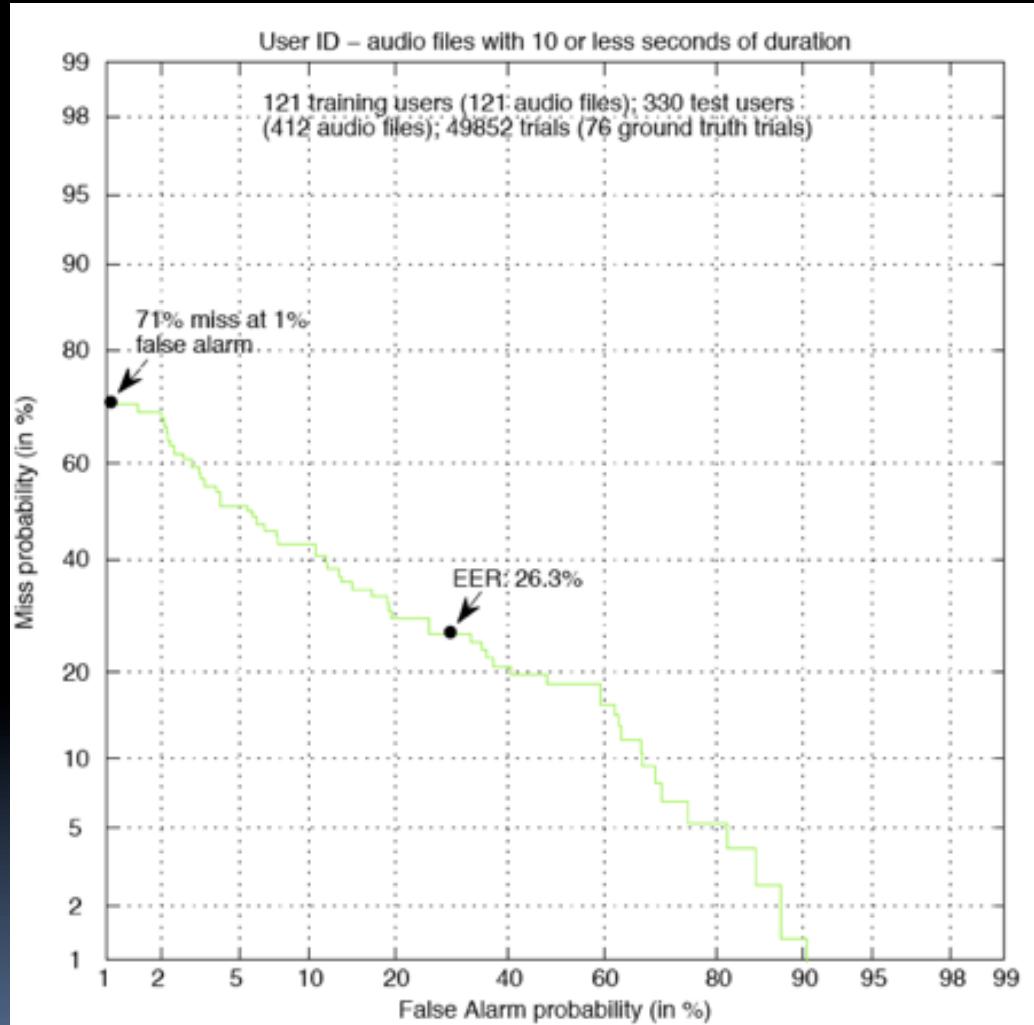
Principle 6



Just because something can't be found today, doesn't mean it can't be found tomorrow



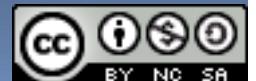
Principle 6: Example



Remember: SocImp I lecture!

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Principle 6

- Actively monitor your information footprint!
- Tools for that will most likely become available in the future

Just because something can't be found today, doesn't mean it can't be found tomorrow





Principle 7



The online world is inseparable from the “real” world





Principle 7: Example



Real story!





Principle 7: TODO

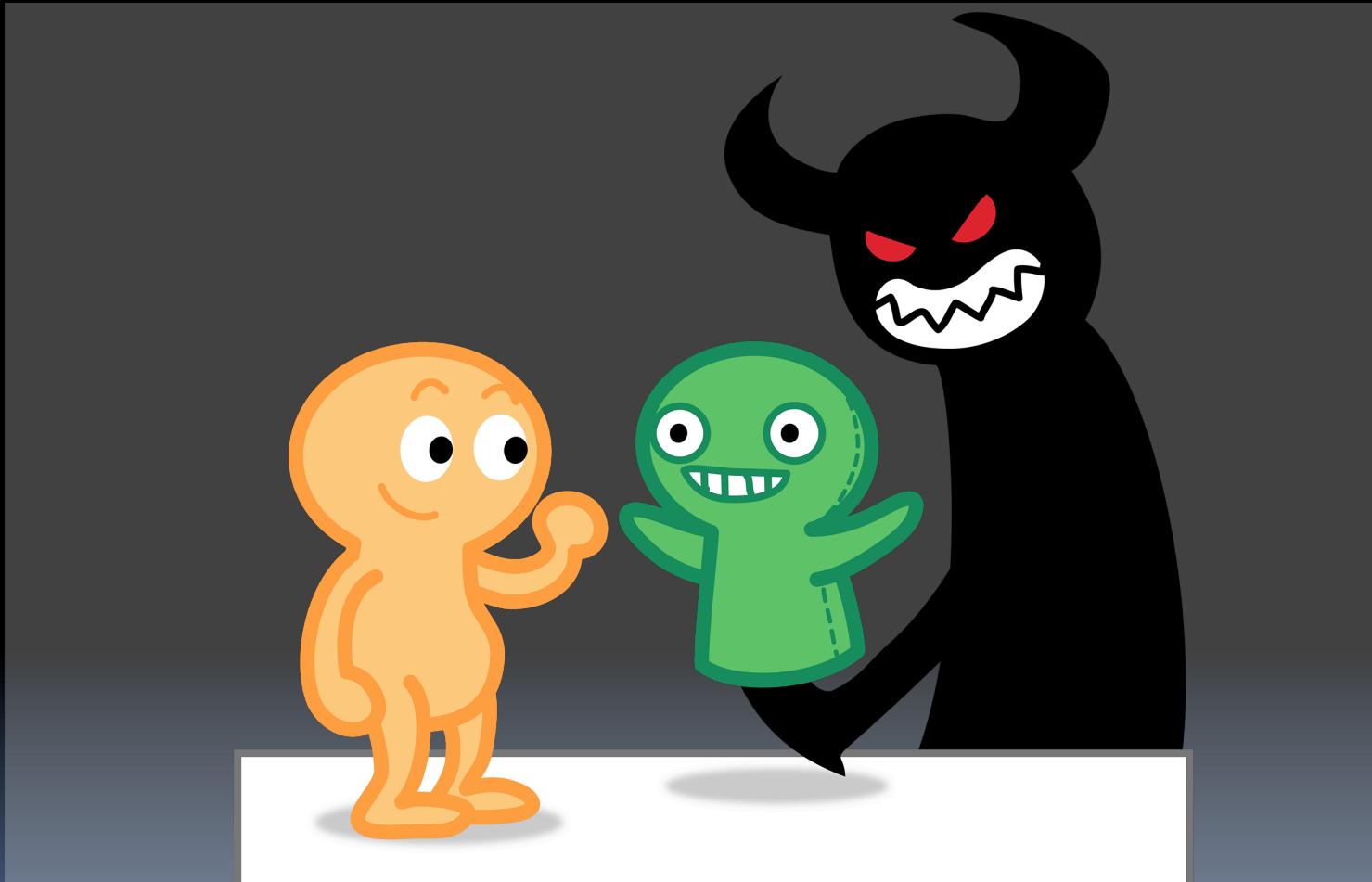
- Online actions have real-world consequences.
- Real-world actions have online consequences.
- Be constantly aware: There is no difference!

The online world is inseparable from
the “real” world





Principle 8



Identity is not guaranteed in the Internet





Principle 8: TODO

- Consider the consequences if the person you are giving the information to is not who he/she claims.
- Use secondary sources of verification.
- If in doubt: Don't share!

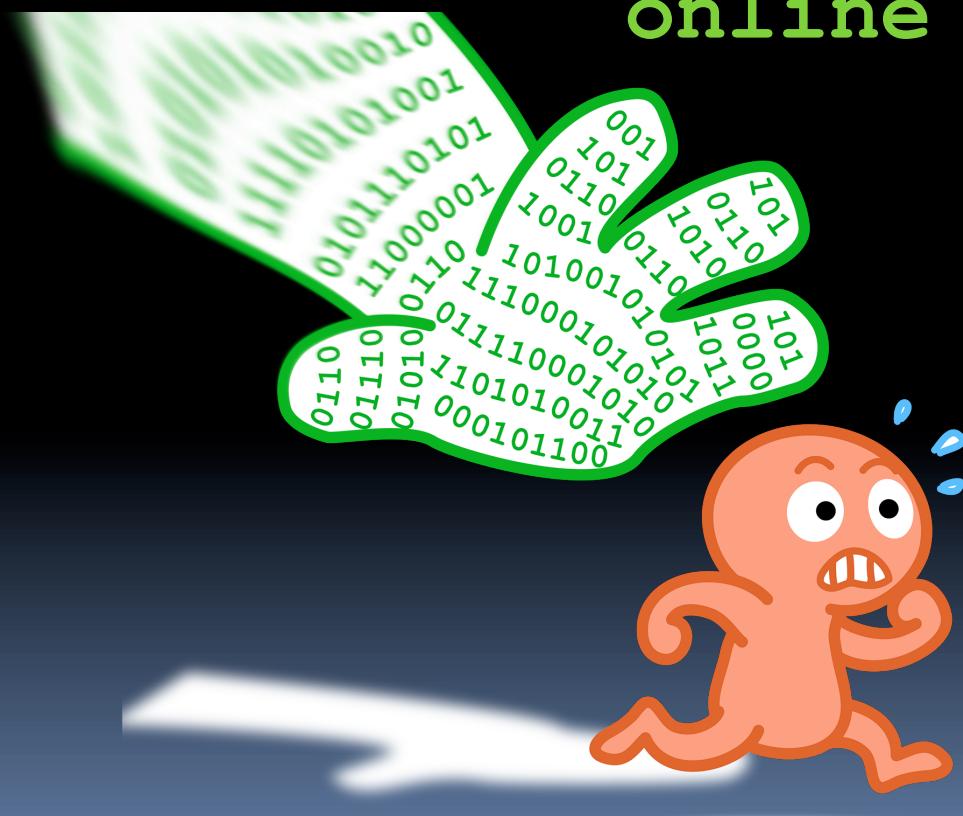
Identity is not guaranteed in the Internet





Principle 9

You can't avoid having an information footprint by not going online





Principle 9: TODO

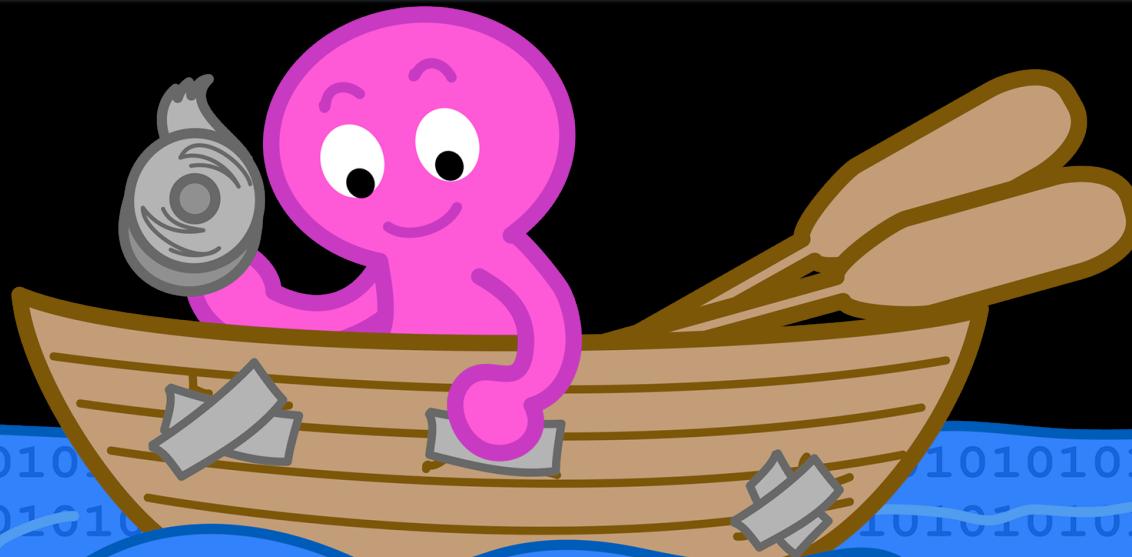
- Laws regulate what employers can share – inform yourself.
- Share what you have learned today with your colleagues, friends and family – they are your biggest information leaks!

You can't avoid having an information footprint by not going online





Principle 10



Only YOU have an interest in
maintaining your privacy





Principle 10: TODO

- Privacy requires work!
- Visit: <http://www.teachingprivacy.org> for more information!

Only YOU have an interest in maintaining your privacy

