


**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>

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*bjc*

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**An Intro to this Lecture**



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**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!

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**10 Principles for Online Privacy**



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

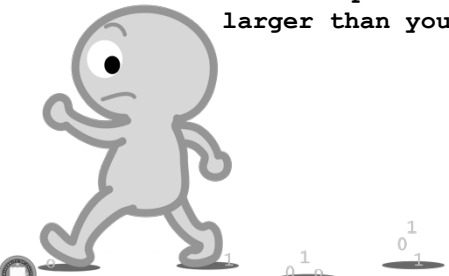
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**Principle 1**

Your information footprint is larger than you think!




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**Principle 1: Example**



Ready or Not!? Privacy App by ICSI

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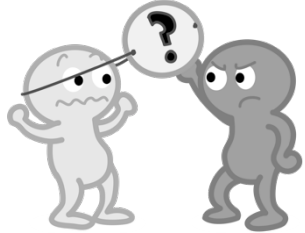
**Principle 1: TODO**

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

Your information footprint is larger than you think!

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**Principle 2**

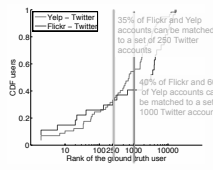


There is no anonymity on the Internet!

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**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.

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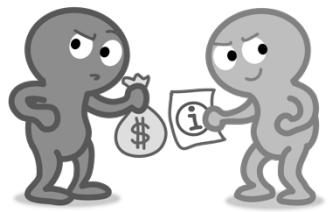
**Principle 2: TODO**

- 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!

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**Principle 3**



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

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**Principle 3: Examples**



<https://www.youtube.com/watch?v=bqWui0PHhz0>

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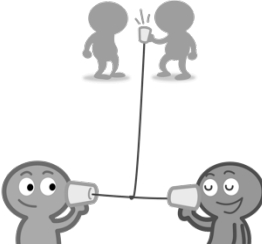
**Principle 3: TODO**

- 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

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**Principle 4**



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

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**Peer Instruction**



Which of the following technology help with that principle?

- Firewalls
- https
- Anonymity Proxy (like Tor)
- Cookie blocker
- Routers

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**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

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**Principle 5**



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

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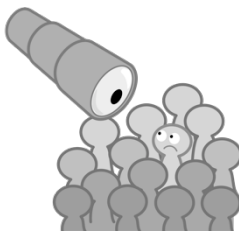
**Principle 5: TODO**



<http://www.onguardonline.gov/media/video-0004-share-care>

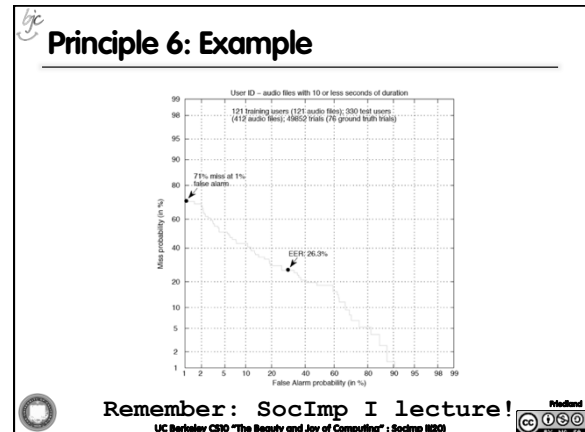
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## Principle 6



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

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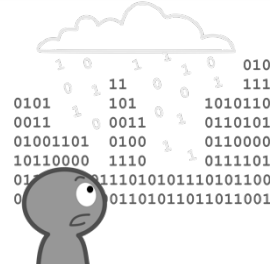
## Principle 6

- 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

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## Principle 7



The online world is inseparable from the "real" world

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## Principle 7: Example



Real story!

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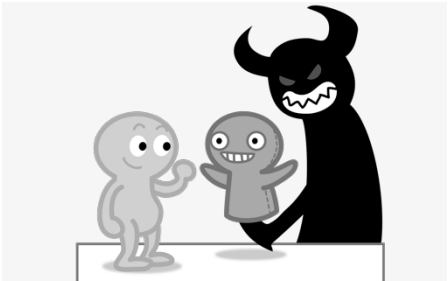
## Principle 7: TODO

- 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

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**Principle 8**



Identity is not guaranteed in the Internet

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**Principle 8: TODO**

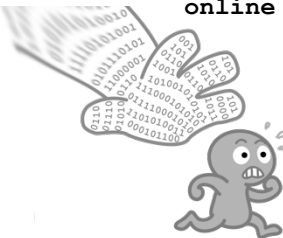
- Consider the consequences if the person you are giving the information to is not who he/she claims.
- Use secondary sources of verification.
- If in doubt: Don't share!

Identity is not guaranteed in the Internet

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**Principle 9**

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



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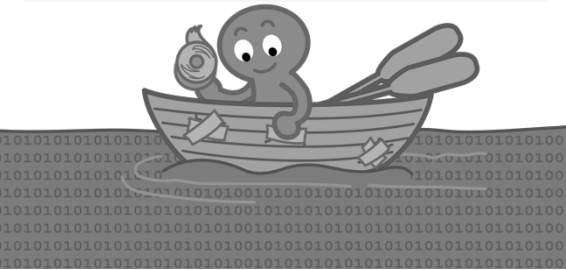
**Principle 9: TODO**

- 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

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**Principle 10**



Only YOU have an interest in maintaining your privacy

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**Principle 10: TODO**

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

Only YOU have an interest in maintaining your privacy

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