



The Beauty and Joy of Computing

Lecture #15 Social Implications III



Jonathan
McKinsey



Hacking for Good?

- Black Hat - bad guys
- White Hat - good guys
- Grey Hat - something in between
- White Hat Examples:
 - Barnaby Jack - jackpotting
 - Jay Radcliffe - insulin pumps
 - Tiffany Rad - prisons
 - Dan Kaminsky - DNS cache poisoning



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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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An Intro to this Lecture



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10 Principles for Online Privacy



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



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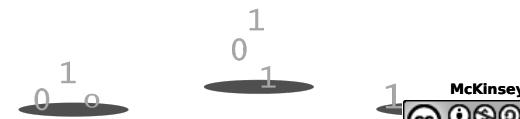
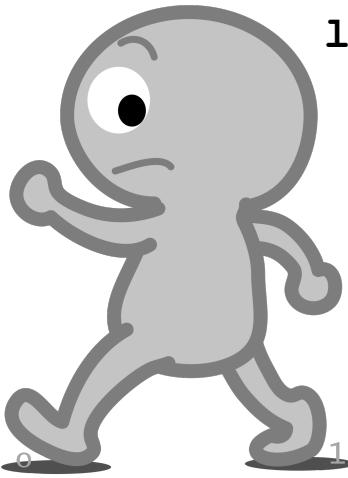
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Principle 1

Your information footprint is

larger than you think!



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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 1: Example



Ready or Not!? Privacy App by ICSI

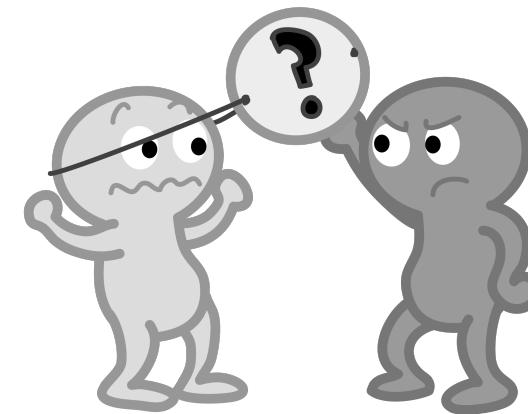


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Principle 2



There is no anonymity on the Internet!



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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!
- Ex: Harvard student and his anonymous bomb threat
- Ex: Uber and Rides of Glory

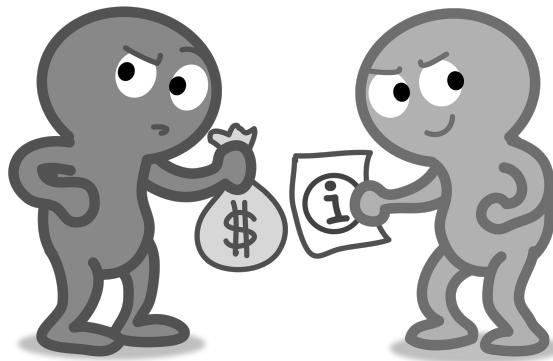
There is no anonymity on the Internet!



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Principle 3



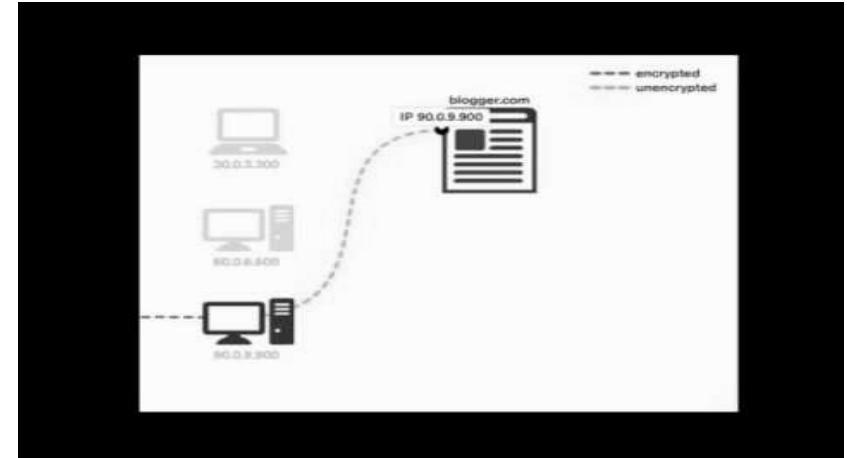
Information about you on the Internet will be used by somebody in their interest – including against you



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How Tor Works



<https://www.youtube.com/watch?v=bqWuiopPHhz0>



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UC Berkeley CS10 "The Beauty and Joy of Computing": Social Implications III (12)



<https://www.youtube.com/watch?v=bqWuiopPHhz0>



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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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Peer Instruction



Which of the following technology help with that principle?

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

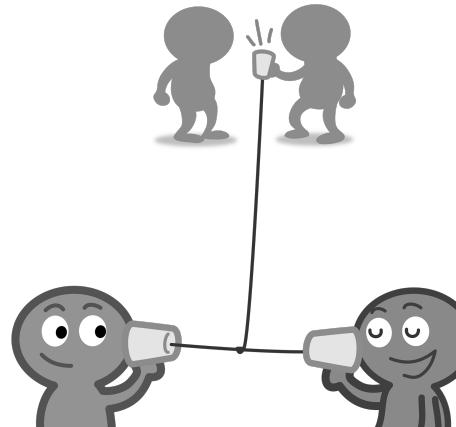


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Principle 4



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



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Principle 4: TODO

- Use strong passwords, keep them private.
- 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



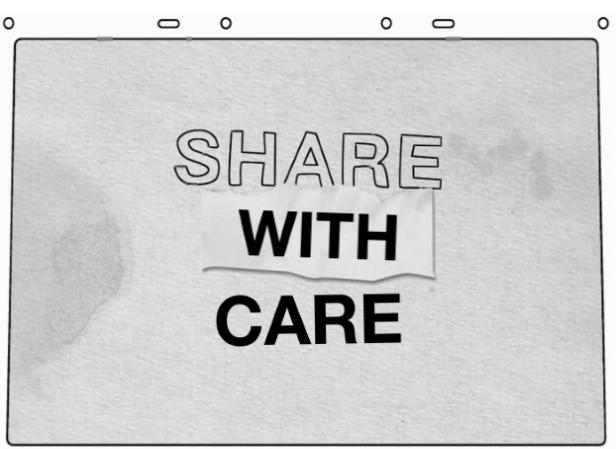
Sharing information over a network means you give up control over that information — forever



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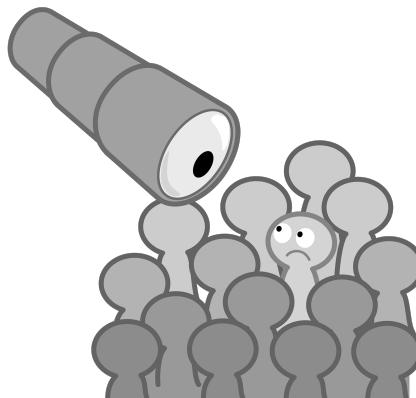
<http://www.onguardonline.gov/media/video-0004-share-care>



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Principle 6



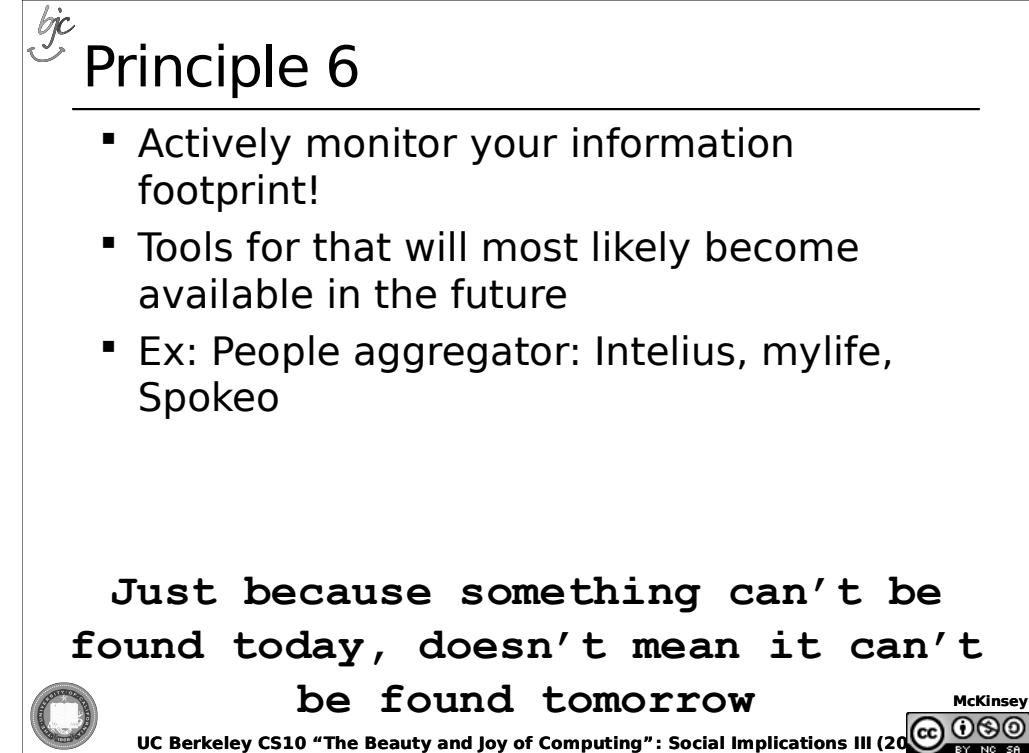
Just because something can't be found today, doesn't mean it can't be found tomorrow



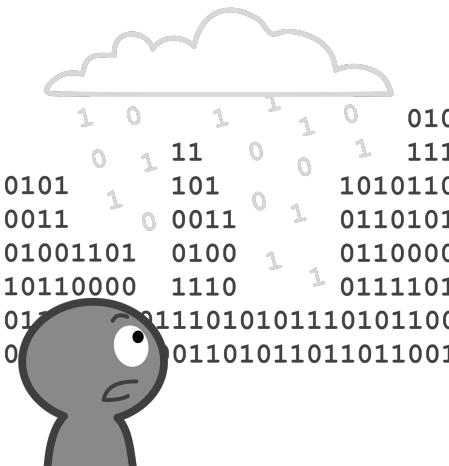
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Principle 7



The online world is inseparable from the “real” world



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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 7: Example



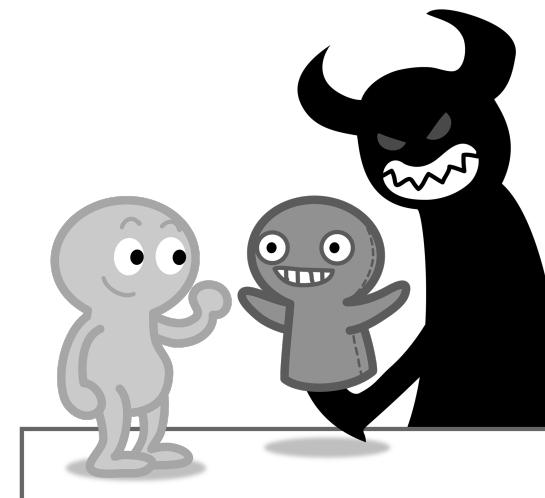
<http://www.dailymail.co.uk/news/article-2093796/Emily-Bunting-Leigh-Van-Bryan-UK-tourists-arrested-destroy-America-Twitter-jokes.html>

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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: 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

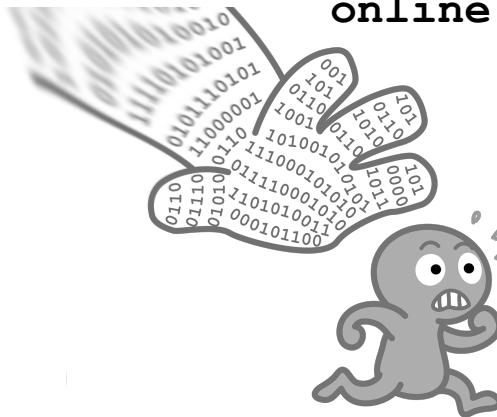


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Principle 9

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



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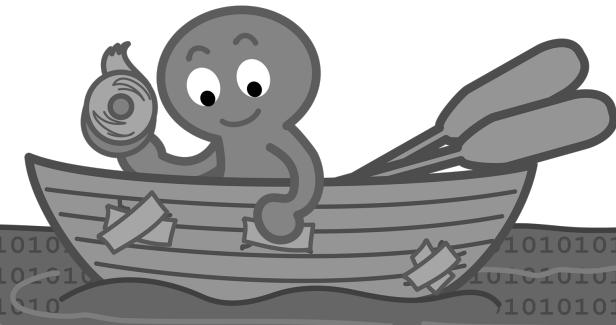
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Principle 10



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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