CSC104 fall 2012
Why and how of computing
week 11

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Text: Picturing Programs
Outline

privacy

mutation

Notes
share, but don’t share

information wants to be shared... how much? with whom?

- bank info
- medical history
- image
- phone #
- don’t operate
- computer
- paper + pencil
- neuron.
privacy, pro or con?

make your lists...

Guess most are somewhere in the middle - privacy is negotiated "right" many would withhold privacy from conspirators but grant it to "regular folks"
concentric circles of privacy
who fits where?
privacy leaks
know privacy’s plumbing

buyer loyalty plans what do they for those “deals”? surveys not just an interruption

credit information who knows you paid late?

recorded viewing check the agreement

black boxes not just for crashes

911 where’s waldo?

rfid bar codes, shopping history, drugs?

computer use what’s your admin see?

cookies where have you been browsing?
required leaks
can lose your identity

Being born, working, imprisoned, or paying taxes, can generate information about you that you aren’t allowed to keep private. How many of these do you think are necessary to identify an American with more than 80% accuracy (according to Dr Latanya Sweeney)?

- hospital of birth
- date of birth
- gender
- postal code
- blood type
what can you do?
increase privacy and security

▶ passwords and pins

▶ know something about contacts

▶ update security software, OSs

▶ careful when you click

For important stuff encrypt.
how badly broken was that phone?

was: GATAAATCT

1. GACTATTAC
2. GATAAAAACCT
3. GATCTA
4. AGTCTAG
5. CBAC
6. KAC
7. CAGT
8. GATC
9. ATCG
10. ACTGATAG
11. ACGTATAG

edit distance 2-3

10, 11 have edit-distance 2
Notes

\[ \text{koch} \rightarrow - - - \]

\text{otherwise}

(beside \( \text{koch} \) (subl d))

(rotate 60 (koch (subl d)))

(rotate -60 (koch (subl d)))

(koch (subl d))