

CS50 for JDs

Privacy, Security

privacy

NETFLIX

Netflix Prize

User ID, Movie Title, Date, Rating

100M ratings, 500K users, 18K movie titles, rating scale of 1–5

3M ratings withheld

cs50.ly/netflix

Netflix Spilled Your Brokeback Mountain Secret,
Lawsuit Claims

Doe v. Netflix

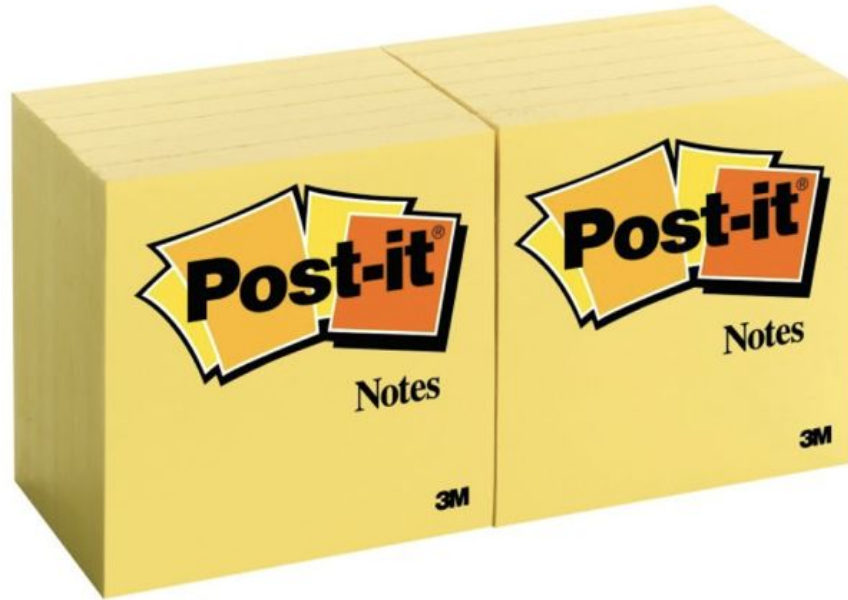
Robust De-anonymization of Large Datasets

(How to Break Anonymity of the Netflix Prize Dataset)

security

secure

passwords



1. guest
2. 123456
3. password
4. 12345
5. a1b2c3
6. 123456789
7. Password1
8. 1234
9. abc123
10. 12345678

brute-force attacks



4-digit passcode

$$10 \times 10 \times 10 \times 10$$

10,000

4-letter passcode

$$52 \times 52 \times 52 \times 52$$

7,311,616

4-character passcode

$$94 \times 94 \times 94 \times 94$$

78,074,896

8-character passcode

$$94 \times 94 \times 94 \times 94 \times$$
$$94 \times 94 \times 94 \times 94$$

6,095,689,385,410,816





9:41

Tuesday, July 24

iPhone is disabled

try again in 1 minute

Emergency

9:41

Tuesday, July 24

iPhone is disabled

try again in 1 minute

Emergency

Google Fi

📶 📶 📶 📶 60%



11:27

Thu, May 28 ☁️ 24°C

Too many attempts. Try again later.

Google Fi

📶 📶 📶 📶 60%



11:27

Thu, May 28 ☁️ 24°C

Too many attempts. Try again later.



Too many attempts. Try again later.

two-factor authentication





keyloggers

SSO

password managers

1password.com

~~lastpass.com~~

...

 December 22, 2022 | By Karim Toubba

Notice of Recent Security Incident

Update as of Thursday, December 22, 2022

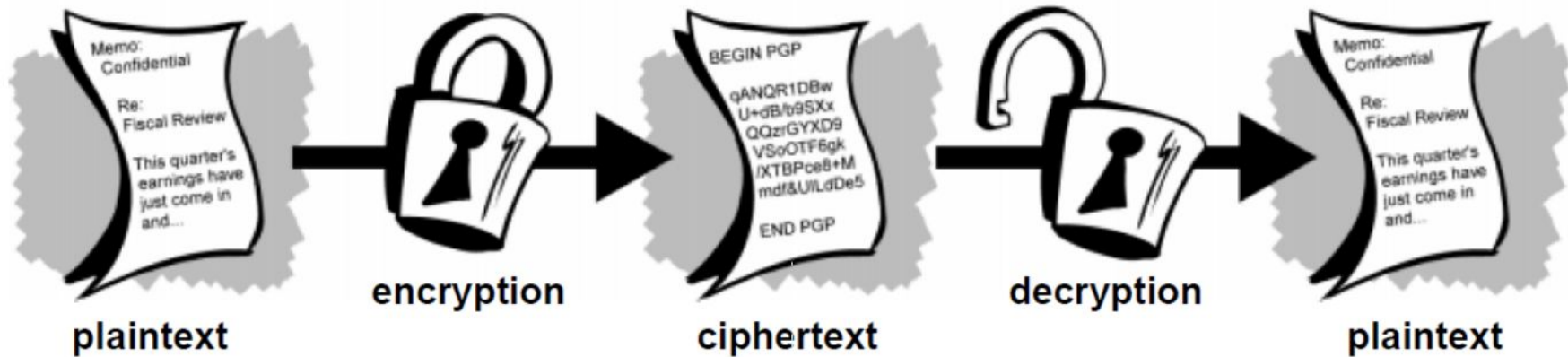
hashes

forgot password?

encryption

Or fher gb qevax lbhe Binygvar.

secret-key encryption



Or fher gb qevax lbhe Binygvar.

Be sure to drink your Ovaltine.

public-key encryption

public key



encryption

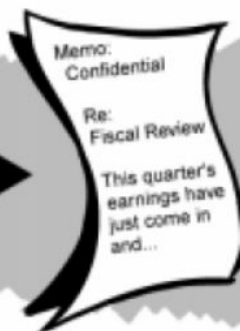


ciphertext

private key

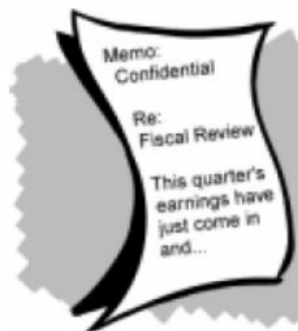


decryption



plaintext

plaintext



HTTPS

email

Report Phishing



Deleting helps you, reporting helps everyone.

phishing@harvard.edu

Learn to click wisely at security.harvard.edu.



Confidential mode

Recipients won't have the option to forward, copy, print, or download this email. [Learn more](#)

SET EXPIRATION

Expires in 1 week



Thu, Nov 4, 2021

REQUIRE PASSCODE

All passcodes will be generated by Google. 



No SMS passcode



SMS passcode

Cancel

Save

end-to-end encryption

PGP





"WhatsApp" Would Like to Access Your Contacts

WhatsApp syncs only phone numbers from your address book to WhatsApp servers to help you connect with other WhatsApp users.

Don't Allow

OK

Tap "Agree & Continue" to accept the
WhatsApp [Terms of Service and
Privacy Policy](#)

[Agree & Continue](#)

digital signatures

VPNs

haveibeenpwned.com

ransomware

storage















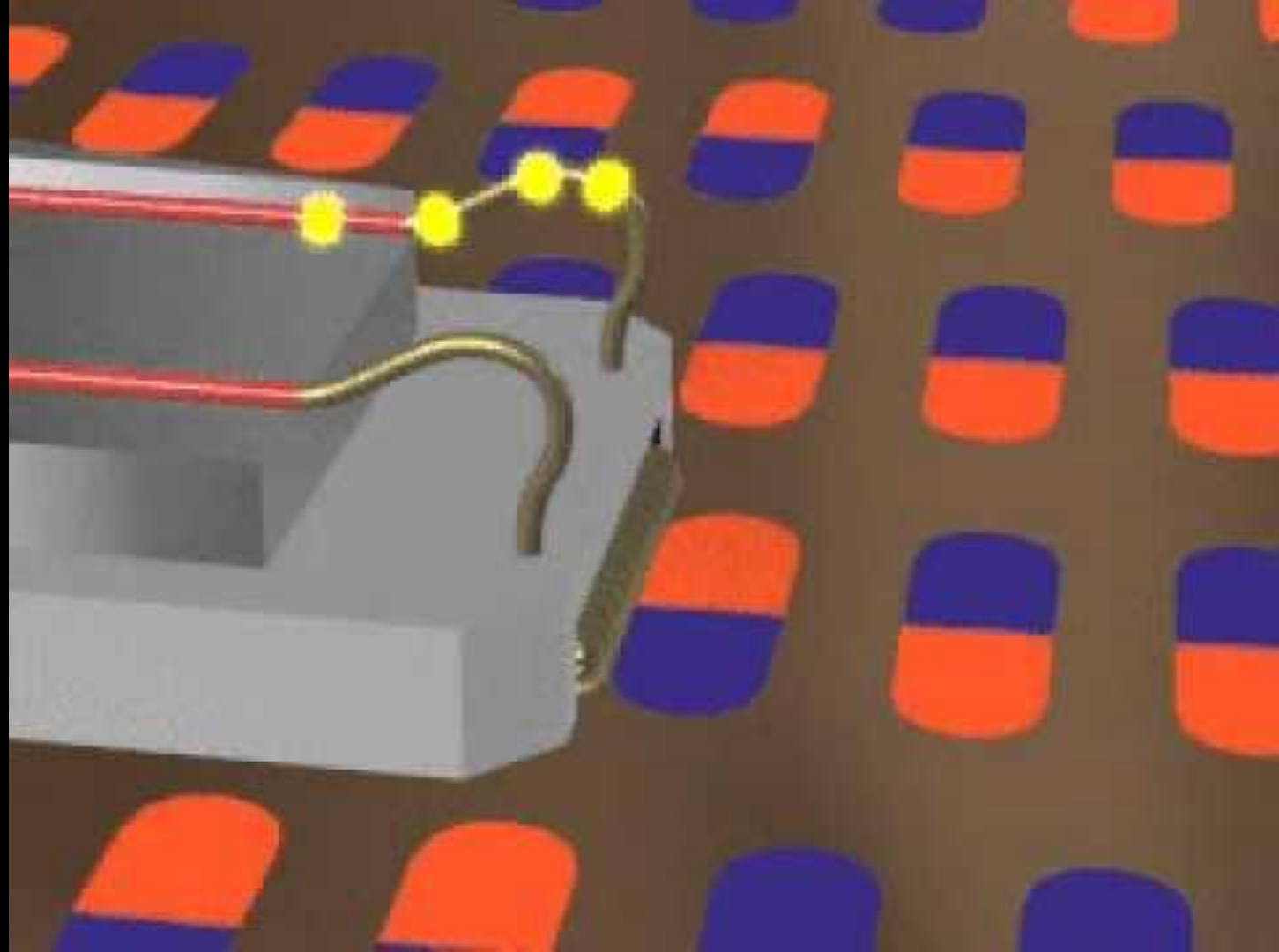












dban.org



full-disk encryption

ransomware

viruses, worms

antivirus software

automatic updates

port scanning

firewalls

open source v. closed source

incognito mode

cookies



New Tab



Search Google or type a URL



Incognito



You've gone Incognito

Now you can browse privately, and other people who use this device won't see your activity. However, downloads, bookmarks and reading list items will be saved. [Learn more](#)

Chrome won't save the following information:

- Your browsing history
- Cookies and site data
- Information entered in forms

Your activity might still be visible to:

- Websites you visit
- Your employer or school
- Your internet service provider

Block third-party cookies

When on, sites can't use cookies that track you across the web. Features on some sites may break.



DELETE COOKIES?!

gegen-den-strich.com

FERNANDEZ





Join Zoom Meeting

<https://zoom.us/j/XXXXXXXXXXXX?pwd=YYYYYYYYYYY>

Meeting ID: XXX XXXX XXXX

Passcode: ZZZZZZ

Assignment 6

Office Hours

CS50 for JDs

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