How much of your personal data is online?

Finding a balance between paranoia and vigilance
Agenda

1. Know your footprint
2. Read the fine print
3. Protect
4. Anonymize
5. Clean up
6. Disinformation/Aliases
7. Question & Answer
Purpose and Scope

- To analyze how much of your personal information is online.
- To make you question how much data you put on the Internet.
- To simulate what a malicious party could do with public information like this.
Know your footprint
### Most Popular Social Networks

<table>
<thead>
<tr>
<th>Network</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>myMeme</td>
<td>Available</td>
</tr>
<tr>
<td>digg</td>
<td>Available</td>
</tr>
<tr>
<td>delicious</td>
<td>Available</td>
</tr>
<tr>
<td>twitter</td>
<td>Available</td>
</tr>
<tr>
<td>StumbleUpon</td>
<td>Available</td>
</tr>
<tr>
<td>YouTube</td>
<td>Available</td>
</tr>
<tr>
<td>flickr</td>
<td>Available</td>
</tr>
<tr>
<td>SQUIDOO</td>
<td>Available</td>
</tr>
<tr>
<td>LiveJournal</td>
<td>Available</td>
</tr>
<tr>
<td>Tumblr</td>
<td>Available</td>
</tr>
<tr>
<td>slideshare</td>
<td>Available</td>
</tr>
<tr>
<td>lost.fm</td>
<td>Available</td>
</tr>
<tr>
<td>LinkedIn</td>
<td>Available</td>
</tr>
<tr>
<td>Blogger</td>
<td>Available</td>
</tr>
<tr>
<td>DISQUS</td>
<td>Available</td>
</tr>
<tr>
<td>Friendfeed</td>
<td>Available</td>
</tr>
<tr>
<td>TypePad</td>
<td>Available</td>
</tr>
<tr>
<td>WordPress</td>
<td>Available</td>
</tr>
<tr>
<td>DailyMotion</td>
<td>Available</td>
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<tr>
<td>Posterous</td>
<td>Available</td>
</tr>
<tr>
<td>foursquare</td>
<td>Available</td>
</tr>
<tr>
<td>Yelp</td>
<td>Available</td>
</tr>
</tbody>
</table>
Who wants your details

- Spammers – targeted phishing
- Corporations
- Cyber criminals – Identity theft
- Investigators
- Hacktivists
- (“The Man”)
- (Alien invaders)
- (NSA)
What details do they want?

- Email
- Username
- Phone #’s
- IP address
- Friends
- GPS location
- Photo’s
- Name
- Hometown
Connect an email to a site

- Does an email exist?
Connect an email to a site

- Does an email exist?

![Netflix login screen with email entered](image1)

![Plaxo address book with email entered](image2)

![Sign Up form with email entered](image3)
- www.stolencamerafinder.co.uk
  - Search by serial number
- Picasa metadata
  - Where is John McAfee
**Photo To Address**

- Pictures with Geotagging can lead to an address

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**EXIF IFD0**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera Make 0x010F</td>
<td>Apple</td>
</tr>
<tr>
<td>Camera Model 0x0110</td>
<td>iPhone</td>
</tr>
<tr>
<td>X-Resolution 0x011A</td>
<td>72/1 =&gt; 72</td>
</tr>
<tr>
<td>Y-Resolution 0x011B</td>
<td>72/1 =&gt; 72</td>
</tr>
<tr>
<td>X/Y-Resolution Unit 0x0128</td>
<td>inch (2)</td>
</tr>
<tr>
<td>Last Modified Date/Time 0x0132</td>
<td>2009:04:08 01:00:13</td>
</tr>
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**EXIF GPS IFD**

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<th>Value</th>
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<tbody>
<tr>
<td>GPS Latitude Reference 0x01</td>
<td>N</td>
</tr>
<tr>
<td>GPS Latitude 0x02</td>
<td>43/1,497 [degrees, minutes, seconds]</td>
</tr>
<tr>
<td></td>
<td>=&gt; 43° 71′ 42″ 285°</td>
</tr>
<tr>
<td>GPS Longitude Reference 0x03</td>
<td>W</td>
</tr>
<tr>
<td>GPS Longitude 0x04</td>
<td>79/1,744 [degrees, minutes, seconds]</td>
</tr>
<tr>
<td></td>
<td>=&gt; 79° 4′ 333°</td>
</tr>
</tbody>
</table>

**Links to online mapping websites**

- Google Maps
- Yahoo! Maps
- MSN® Maps & Directions
- Mapquest®
- Open KML data with Google™ Earth
- Save KML data to File
- Save KML data to File and open with Google™ Earth
Original Image Photo Viewing

- camerasummary.com
Scripted (70 + sites)
<table>
<thead>
<tr>
<th>Url</th>
<th>Full name</th>
<th>Website</th>
<th>City</th>
<th>St</th>
<th>Age</th>
<th>G</th>
<th>Photo</th>
</tr>
</thead>
<tbody>
<tr>
<td>about.me/kevinrose</td>
<td>Kevin Rose</td>
<td>twitter.com/kevinrose</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><a href="http://www.facebook.com/kevinrose">www.facebook.com/kevinrose</a></td>
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</tr>
<tr>
<td>github.com/kevinrose</td>
<td>Kevin Rose</td>
<td><a href="http://www.digg.com">www.digg.com</a></td>
<td>San Francisco</td>
<td>CA</td>
<td></td>
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</tr>
<tr>
<td><a href="http://www.youtube.com/user/kevinrose">www.youtube.com/user/kevinrose</a></td>
<td>Kevin Rose</td>
<td>about.me/kevinrose</td>
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<td><a href="http://www.okcupid.com/profile/kevinrose">www.okcupid.com/profile/kevinrose</a></td>
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<td>Chicago</td>
<td>IL</td>
<td>32</td>
<td>F</td>
<td></td>
</tr>
<tr>
<td>hulu.com/profiles/kevinrose</td>
<td>Kevin R.</td>
<td></td>
<td>San Francisco</td>
<td>CA</td>
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<td>pinterest.com/kevinrose</td>
<td>Kevin Rose</td>
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<tr>
<td><a href="http://www.flickr.com/people/kevinrose">www.flickr.com/people/kevinrose</a></td>
<td>Kevin Rose</td>
<td>kevinrose.com</td>
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<td>mylife.com/kevinrose</td>
<td>Kevin Rose</td>
<td></td>
<td>Huntsville</td>
<td>AL</td>
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<td>kevin rose</td>
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<tr>
<td>fffound.com/home/kevinrose/post/</td>
<td></td>
<td>twitter.com/kevinrose</td>
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<td>badass.com/kevinrose</td>
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<td>linkedin.com/in/kevinrose</td>
<td>Kevin Rose</td>
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<td>kevinrose.tumblr.com</td>
<td>Kevin Rose</td>
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<tr>
<td>kevinrose.typepad.com</td>
<td>Kevin Rose</td>
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<td>vimeo.com/kevinrose</td>
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</tbody>
</table>
Maltego

- Visually search and correlate
Live Twitter feed search

- Tweets containing
  - Home alone
  - Home number
  - Leaving vacation
  - Birthday

![Tweets containing tweets about being home alone, leaving for vacation, and birthdays.](image-url)
Job Seekers Liability

HR departments are now searching Social Networking sites before hiring.

- Chai! Am sleeping at work oh!
  - fa,j, j.ike 7:23

- I'm skipping work and staying home today.

- Skipping work an going to eat and enjoy my day! :p

- Stealing internet from work.
  - :D
  - dinn 2:04

- Getting stoned this morning
  - liserr 6:29

- I work in a dept. That has 7 people on staff. My scumbag boss orders lunch for everyone but me!!
  - I'll fix em. #boss sucks
READ THE FINE PRINT!
Read the End User License Agreement?

Ain't Nobody Got Time Fo Dat!
PC Pitstop - $1000 for Free

License Agreement
Please read the following important information before continuing.

Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.

Residents entered into and to be performed entirely within the United States.

SPECIAL CONSIDERATION
A special consideration which may include financial compensation will be awarded to a limited number of authorize licensee to read this section of the license agreement and contact PC Pitstop at consideration@pcpitstop.com. This offer can be withdrawn at any time.
Google

- Google keeps your searches and other identifiable user information for an undefined period of time
- This service tracks you on other websites
- Google can use your content for all their existing and future services
- Partial archives of their terms are available
- Google may collect your device fingerprint.

YouTube

- Terms may be changed any time at their discretion, without notice to the user
- Processes a personal information (email, id but also device info, location)
- They can remove your content at any time and without prior notice
- The copyright license is broader than necessary
- Reduction of legal period for cause of action
No Tracking

Facebook
- Very broad copyright license on your content
- This service tracks you on other websites
- Facebook automatically shares your data with many other services
- Facebook uses your data for many purposes
- You can give comments before changes

Amazon
- Terms may be changed any time at their discretion, without notice to the user
- This service tracks you on other websites
- Amazon enables third-party advertisers to target you by default
- Amazon may sell user data as part of a business transfer
You grant perpetual license to anything you publish
Spotify states risks of public information
No promise to inform about government requests
Spotify may transfer and process your data to somewhere outside of your country
Spotify can delete your account without telling you

https://tosdr.org/
THEY'RE GOING TO SELL MY DATA

I GUARANTEE IT
Protect
Facial Recognition
Researchers at University of Illinois create adversarial face pattern that blocks neural network face detector
TIN FOIL FEDORA

BECAUSE CRAZY DOESN'T HAVE TO BE TACKY
YOU JUST WENT FULL TINFOIL HAT
YOU NEVER GO FULL TINFOIL HAT
FOREND SAYS:

There are very important differences between the protection provided by a Faraday cage and an active ESE rod in lightning protection. ESE rods can gain you the following advantages.

- Based on the Project; 4 - 5 times lesser costs
- Easy and speedy installation
- The advantage of aesthetic appearance
- The advantage of labor savings in montage
- Availability of system’s operation check as desired
- Based on the Project, capability of protecting an area 3 times larger
FACEBOOK PRIVACY POLICY

YOU WANT IT PRIVATE? DON'T POST IT ON FACEBOOK!
Privacy Settings

**Sharing on Facebook**
These settings control who can see what you share.

<table>
<thead>
<tr>
<th>Everyone</th>
<th>Friends of Friends</th>
<th>Friends Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everyone</td>
<td>Your status, photos, and posts</td>
<td></td>
</tr>
<tr>
<td>Friends of Friends</td>
<td>Bio and favorite quotations</td>
<td></td>
</tr>
<tr>
<td>Friends Only</td>
<td>Family and relationships</td>
<td></td>
</tr>
<tr>
<td>Recommended</td>
<td>Photos and videos you’re tagged in</td>
<td></td>
</tr>
<tr>
<td>Custom</td>
<td>Religious and political views</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Birthday</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Permission to comment on your posts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Places you check in to</td>
<td></td>
</tr>
</tbody>
</table>

Average Facebook user has:
245 friends and 156,569 friends of friends
Prevention

- Avoid using work email for non work sites
- Avoid using same password anywhere
  - P@ssw0rd#8 vs. NascarP@ssw0rd#8
- Make user ID uniq and difficult to guess
- Know your footprint to know your exposure
- Use a separate junkmail email address
  - Gmail, etc lets you check both
- BCC instead of CC
I'm glad your paranoia over Facebook doesn't outweigh your desire to get birthday wishes on Facebook.
THINKS THE GOVERNMENT IS INVADING THEIR PRIVACY

POSTS EVERY SINGLE DETAIL ABOUT THEIR LIFE ON FACEBOOK
Hiding from the Internet

https://inteltechniques.com/books.html
';--have i been pwned?

Check if you have an account that has been compromised in a data breach

john.doe@uis.edu

270
pwned websites

4,948,721,769
pwned accounts

64,680
pastes

71,736,534
paste accounts

Top 10 breaches

711,477,622 Onliner Spambot accounts
593,427,119 Exploit.In accounts
457,962,538 Anti Public Combo List accounts
393,430,309 River City Media Spam List accounts
359,420,698 MySpace accounts
234,842,089 NetEase accounts
disinformation
Disinformation

- Delete true stuff
- Use fake names
- Put different bogus info for each store
  - Harvey WallBanger
    - 217-867-5309
- Track how many times your info gets sold off
Aliases
Aliases

- Junk Mail identity
- Professional
- Hacking
- Performing
- Activist
What if I told you
The tinfoil-hat people are right?
IOT used to solve crimes

Cops use murdered woman's Fitbit to charge her husband

Suspect OKs Amazon to hand over Echo recordings in murder case
Alexa Takes the Stand: Listening Devices Raise Privacy Issues

“smart” utility meter

phone calls
YOU GET A TIN FOIL HAT! YOU GET A TIN FOIL HAT!
TIN FOIL HATS FOR EVERYONE!
Thank you