



OLLI at Illinois
NOVA Study Group May 23rd
Roy Campbell

Secrets in Your Data: *NOVA* Study Group

Roy Campbell

Thursday, 10:00 a.m. – 11:30 p.m.
Session 3: May 23
Format: In-person

- This week we view, and discuss the Secrets in Your Data *NOVA* Science program Season 51 Episode 7 broadcast on PBS. It's a 53 minutes *NOVA* program, so we will see the whole show with breaks for discussion. We will leave time to discuss the science presented in more detail at the end.
- PBS Official Nova site <https://www.pbs.org/video/secrets-in-your-data-eq39xb/>
This site has a transcript of the video.



Quick References to Video Content

- Hayley Tsukayama EFF <https://www.eff.org/nb/about/staff/hayley-tsukayama>
- Eva Galperin EFF https://en.wikipedia.org/wiki/Eva_Galperin
- Tim Berners-Lee https://en.wikipedia.org/wiki/Tim_Berners-Lee
- Cookies https://en.wikipedia.org/wiki/HTTP_cookie
- Web Beacon or Pixel Tracking https://en.wikipedia.org/wiki/Web_beacon
- Social Network https://en.wikipedia.org/wiki/Issues_relating_to_social_networking_services
- Christine Lemmer-Webber https://en.wikipedia.org/wiki/Christine_Lemmer-Webber
- Security and Privacy https://en.wikipedia.org/wiki/Information_privacy
- U.S. Data Privacy Protection Laws: A Comprehensive Guide <https://www.forbes.com/sites/conormurray/2023/04/21/us-data-privacy-protection-laws-a-comprehensive-guide/?sh=6cc099365f92>
- Illinois Data Privacy Laws <https://dotsecurity.com/insights/blog-everything-about-illinois-data-privacy-laws>
- Distributed Social Network https://en.wikipedia.org/wiki/Distributed_social_network
- Mastodon <https://joinmastodon.org/> Bluesky <https://bsky.social/about>

Web beacon or Pixel Tracking

- Web beacons are unseen HTML elements that track a webpage views. Upon the user revisiting the webpage, these beacons are connected to cookies established by the server, facilitating undisclosed user tracking.
- One way to neutralize such email tracking is to disconnect from the Internet after downloading email but before reading the downloaded messages.
- The Beacon API ([application programming interface](#)) is a candidate recommendation of the [World Wide Web Consortium](#), the standards organization for the web. It is a standardized API that directs the [email client](#) to silently send tracking data back to the server, i.e., without alerting the user and thus disturbing their experience.

What information is sent to a server when a Web Beacon is viewed?

- The IP address of the computer that fetched the Web Bug
- The URL of the page that the Web Bug is located on
- The URL of the Web Bug image
- The time the Web Bug was viewed
- The type of browser that fetched the Web Bug image
- A previously set cookie value

https://web.archive.org/web/20010729060646/www.eff.org/Privacy/Marketing/web_bug.html

Questions

1. What personal data is being collected from individuals in their modern, digital lives?
2. What are the benefits and risks of sharing personal data online?
3. How can individuals maintain their privacy and security online?
4. What are the implications of the decentralized web for privacy and control over personal data?
5. How has data collection evolved historically, from punch cards to real-time networked systems?
6. What was the original intention behind the creation of the World Wide Web, and how has it evolved into a commercialized platform?
7. How do big tech companies utilize personal data, and what power do they have in determining individual privacy?
8. Who ultimately owns and monetizes the data generated by individuals online?
9. What are the government and state regulations that govern privacy and security?