

# Online Tracking And You

## Cypurr 2019

# Who Is Tracking You?

## Internet Service Providers (ISPs)

- People who provide you access to the Internet have knowledge of what websites you visit

## Websites/Web Apps

- Sites you visit are tracking your usage of their site and (potentially) behavior on other sites

# How Do ISPs Track You Online?

## Domain Name Service (DNS) Lookups

- Every time you request a site like [www.google.com](http://www.google.com) they have a log of the request to lookup the IP address

## Usage Patterns

- How often you use the Internet, what times you browse the Web, how often you use their services

# How Do Websites Track You Online?

## Cookies

- Pieces of information stored on your computer as you visit different sites

## Tracking Beacons

- Element on site that transmits data about you back to a server

# What Are ISPs Tracking?

## Traffic Patterns

- Sites you've visited, search history, communications
- What you do when you are using their service

## Traffic History

- Data on what you are browsing, across a given time

# What Are Websites Tracking?

## Analytics

- Page load time, average response time

## Behavior

- Actions on site, links visited, time spent on site
- “Cool” information is tracked *across* sites

# Why Are They Tracking?

Beyond tracking use of site, companies can sell this data to advertisers for more efficient marketing

- “This person has looked up mountain cabins”
- “This person has bought one airplane ticket”
- “This person has searched for ‘ski masks’ this week”

# Ghost Profiles

Sites can also figure out who you are based on data provided by other users

So-called “ghost profiles” can be built about *you* if people you know provide information about you to the service



# What Can You Do?

Most sites require the ability to track you in some way, and many of them have clauses built in to mandate it

Have you consented to a site tracking you?

- If you use the site: YES
- If you've visited the site: More than likely
- If you've *never* visited the site: NO

# What Can You Do?

Some practices to follow in helping to reduce tracking

- DNS over HTTPS/Third Party DNS
- Ad blockers on browser
- Cookie Deleter/Privacy Badger extension
- Browser containers (on browsers that support them)
- Terms of Service Reader

# Bottom Line

Information is valuable in this time

- Learning about what people are doing on the Internet is valuable
- Sites want to maximize their value

You should be aware of what information you're giving up

- Be aware of what you are revealing online