Abstractions: Privacy and Security

- **Why does phishing work?**
  - ➤ **What is whaling?**
- **Birthday+zip=knowledge**
  - ➤ **Who are you?**
- **What should Congress know?**
  - ➤ **Annie Anton**
  - ➤ **Latanya Sweeney**
  - ➤ **Lorrie Cranor**

Cookies: Big picture overview

- **Cookies help http**
  - ➤ **http is stateless**

DELETE COOKIES?!

server   client
get fb.com
1.3.2.4
content back
Cart??   Buy this, buy that!
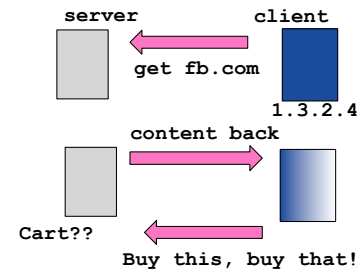
Cookie overview continued

- http://en.wikipedia.org/wiki/HTTP_cookie
  - ➤ **Reasonable overview**
- **Cookie is a small textfile, not code/executable**
  - ➤ **Expires at end of session or in the future**
  - ➤ **Stored on your computer**
  - ➤ **Comes from a server you "visit"**
    - • Third party cookes
- **How can a cookie track you? It can't (well, ok)**
  - ➤ **Helps client-server back and forth and ...**

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www.si.com

- **40 cookies**
  - ➤ cnn.com
  - ➤ si.com
  - ➤ tacoda.net
  - ➤ doubleclick.net
  - ➤ revsci.net
- **Dependencies:**
  - ➤ **Content comes from many places**
  - ➤ **Scripts, content, images, ads**

Cookies from websites

nbc.com

- **43 cookies**
  - google.com
  - doubleclick.net
  - quantserve.com
  - bluekai.com
  - tacoda.net
  - atwola.com
  - advertising.com
  - crwdcntrl.com

People.com

- **36 cookies**
  - doubleclick.net
  - atwola.com
  - tacoda.net
  - google.com
  - quantserve.com
  - revsci.net
  - advertising.com
  - 2o7.net

College Newspaper Cookies

School Paper	# cookies	Cookie Sites
Duke Chronicle	8	Duke, Google
Daily Tarheel	15	Tarheel, doubleclick, youtube, facebook, Google
Stanford Daily	9	Stanford, Google, Sharethis
Harvard Crimson	20	Harvard, tribalfusion, Google, adtmt, burstnet, quantserve, doubleclick,
Daily Dartmouth	8	Dartmouth, paperg, Google
Yale Daily News	13	Yale, Google, doubleclick, quantserve, youtube
MIT	7	MIT, Google

Anony [mity | mous]

Packin' the K (Eugene Kaspersky)

The Register
Biting the hand that feeds IT

Security boss calls for end to net anonymity
Kaspersky's online police state
By Dan Goodin in San Francisco • Get more from this author
Posted in Security, 16th October 2009 20:06 GMT
Free whitepaper – Avoiding 7 common mistakes of IT security compliance

The CEO of Russia's No. 1 anti-virus package has said that the internet's biggest security vulnerability is anonymity, calling for mandatory internet passports that would work much like driver licenses do in the offline world.

What can you say, where can you say?

- **Rush Limbaugh and the NFL**
  - **Source, story, repercussions**

- **Steinbuch v Cutler**
  - **Blog, private becomes public, politics**

- **Ciolli v Iravani**
  - **AutoAdmit: JuicyCampus for law school?**

Anonymous and wannabe-anonymous

- **Limbaugh forced out of NFL-owner/bid**
  - **Why? Who? What? When? Wikiquote**
    - "The quotes were added by a user with the IP address of 69.64.213.146" steyonline.com
    - Rick Sanchez CNN tweets: "*i've know rush. in person,i like him. his rhetoric, however is inexcusably divisive. he's right tho. we didn't confirm quote. our bad.*"
  - **Can an IP address be spoofed?**
- **Mainstream news hasn't picked this up, all over the blogosophere**

Steinbuch v Cutler (and Hachette)

- **Washingtonienne blog by Jessica Cutler**
  - **Risqué too mild: what she did with "RS"**
  - **Robert Steinbuch sues, $20 million**
  - **Wonkette blog links, sued too**

- **Communications Decency Act**
  - **Some struck down: First Amendment**
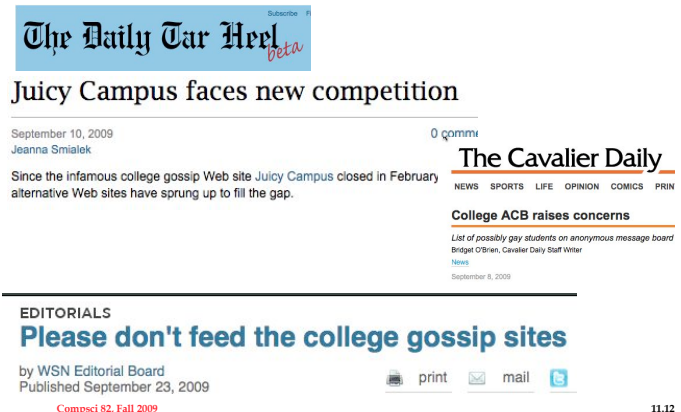 - **Section 230 protects third-party/websites**

John Doe v "man walks into bar"

- **AutoAdmit and Anthony Ciolli**
  - **Anonymous and in 2007 gossipy**
  - **Two female Yale Law students targeted**
    - Subsequently one doesn't get job offers, why? Google!
  - **Anonymous, defamation online**
- **High profile, likely pro bono defenders**
  - **Ciolli countersues, section 230**
- **Slimed Online article summarizing issues**
  - **If Heller and Iravani identify… trouble?**

Juicy? They're Back and They're Bad

The Daily Tar Heel *beta*

Juicy Campus faces new competition

September 10, 2009 — Jeanna Smialek — 0 comm...

Since the infamous college gossip Web site Juicy Campus closed in February alternative Web sites have sprung up to fill the gap.

The Cavalier Daily
NEWS SPORTS LIFE OPINION COMICS PRIN

College ACB raises concerns
List of possibly gay students on anonymous message board
Bridget O'Brien, Cavalier Daily Staff Writer
News
September 8, 2009

EDITORIALS
Please don't feed the college gossip sites
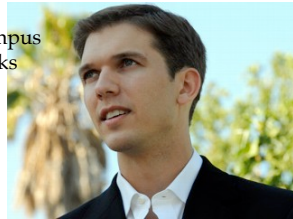by WSN Editorial Board
Published September 23, 2009

print   mail

Anonymity on the Internet

What's different about Juicy Campus
is that vicious, anonymous attacks
are the site's raison d'être,
not unfortunate by-products.

The 20-year old at the heart of web's most
anarchic and influential site

The Onion Router (TOR)

- **Online Anonymity**
  - ➤ **Trusted network ensures anonymity**
  - ➤ **How can we know it's trusted?**

- **For Alice to talk to Bob, need three relays**
  - ➤ **Alice talks to R1->R2->R3->talks to Bob**
  - ➤ **Secure protocols/handshaking help**
  - ➤ **Open source BSD license, "free"**

Who Uses Tor? (torproject.org),

- **300,000 daily users**
  - ➤ **Why does each group use TOR?**
  - ➤ **China? Iran?**

- **Can you Tor?**
  - ➤ **Usability**

Who uses Tor?
- Normal people
- Law Enforcement
- Human Rights Activists
- Business Execs
- Militaries
- Abuse Victims
https://torproject.org/torusers

How is Tor like bittorrent like p2p?

- **What does peer-to-peer mean?**
  - ➤ **Who are the peers, how organized?**
  - ➤ **Centralized, distributed, ...**
  - ➤ **Why do we want p2p connections?**
- **Commons**