

# Hacktivism: The Aaron Swartz case study

# Uber and the media

<http://www.buzzfeed.com/bensmith/uber-executive-suggests-digging-up-dirt-on-journalists>

<http://bits.blogs.nytimes.com/2014/11/18/emil-michael-of-uber-proposes-digging-into-journalists-private-lives/>

<http://bits.blogs.nytimes.com/2014/11/19/daily-report-uber-a-start-up-in-need-of-a-cultural-shake-up/>

- Emil Michael, Uber executive, suggests the company should "should consider hiring a team of opposition researchers to dig up dirt on its critics in the media — and specifically to spread details of the personal life of a female journalist who has criticized the company."

# Fining guests for a poor review

<http://www.bbc.com/news/uk-england-30111525>

- Typically included in "the fine print", can companies do this? Angry customers can complain online, and if their complaint "goes viral", the company is likely to back down

# Free speech and the Internet: Anonymous vs. the KKK

<http://www.bbc.com/news/blogs-trending-30105412>

- KKK threatened to hurt (violent) Ferguson protesters
- In response Anonymous " 'unhooded' alleged Klan members online, and provided links to social media accounts which contained their photos, addresses, phone numbers, ages, workplaces, and photos of their children."

# Hacktivism - definition

Hacktivist: n. a person who uses computer crimes to further social or political ends -  
Australian Oxford Dictionary

# What is Hacktivism?

Hacktivism can be a politically constructive form of civil disobedience or an anarchic gesture; it can signal anti-capitalist protest or commercial protectionism; it can denote spammers or antiabortion activists, counter-surveillance experts or open source–code advocates.

Krapp, Peter. Terror and Play, or What Was Hacktivism?

<http://www.mitpressjournals.org/doi/pdf/10.1162/152638105774539770>

# What is Hacktivism?

<http://www.imperva.com/Resources/Glossary?term=hacktivism>

Hacktivism uses cyber attacks based on political motivations who use cyber sabotage to promote a specific cause. Hacktivists are not motivated by money but instead are *motivated by revenge, politics, ideology, protest* and a desire to humiliate victims. And *high visibility is key*: what's the point of embarrassing someone if you they didn't know who performed the attack?

# Hacktivism may include:

- Defacing web sites
- Distributed Denial of Service (DDOS) attacks
- "Liberation" of material



# Brief history of Hacktivism

- 1989 - Hacking into NASA and the Dept of Energy protesting Nukes
- 1994 - DDOS against British Criminal Justice and Public Order Act
- 1996 - Cult of the Dead Cow coins the term Hacktivism
- 2003 - 4chan.org

# Brief history of Hacktivism - 2

- April 2007 - Russian DDOS attack of Estonian government web sites
- January 2008 - Anonymous moves against the Church of Scientology
- Early 2010 - Manning's theft of classified documents and providing them to wikileaks
- November 2010 - Anonymous attack on the Tunesian Stock Exchange

# Brief history of Hacktivism - 3

- December 2010 - Operation Avenge Assange
- December 2011 - Stratfor attack
- January 2012 "Nightmare" attack on Tel Aviv Stock Exchange and El Al

# Brief history of Hacktivism - 4

- February 2012 - "Sabu" and FBI/Interpol arrests
- January 2013 - Aaron Swartz commits suicide
- June 2013 - Snowden's release of classified NSA materials
- August 2013 - Sentencing of Chelsea Manning
- December 2013 - PayPal14 plea deal

# The Aaron Swartz case study

- What happened
- Interesting policy questions
- Can ethics help?

# What happened?

- Swartz was arrested by MIT police after downloading large quantities of JSTOR articles

# The Internet's Own Boy: The Story of Aaron Swartz

- <https://www.youtube.com/watch?v=vXr-2hwTk58>
  - Too long to watch in class ( $> 1.5$  hours)
  - Too one sided
  - Not deep enough with regards to many of the interesting issues raised.
  - It is a well done movie

# Who was Swartz?

- Helped to create RSS, and the creative commons
- Attended Stanford (for a year)
- Founded Infogami, which got merged into the company that became Reddit
- Founded watchdog.net
  - Wrote the Guerilla Open Access Manifesto



# From: Guerilla Open Access Manifesto

“Information is power. But like all power, there are those who want to keep it for themselves. The world's entire scientific and cultural heritage, published over centuries in books and journals, is increasingly being digitized and locked up by a handful of private corporations. Want to read the papers featuring the most famous results of the sciences? You'll need to send enormous amounts to publishers like Reed Elsevier. There are those struggling to change this. The Open Access Movement has fought valiantly to ensure that scientists do not sign their copyrights away but instead ensure their work is published on the Internet, under terms that allow anyone to access it.”

# Who was Swartz?

- Continued as an activist
  - Fought against SOPA
  - Prior to JSTOR, he released a large number of Public Access to Court Electronic Records (PACER) records

# What happened to Swartz?

- Initially prosecuted in MA, then switched to federal prosecutor
- An aggressive federal prosecutor filed more than a dozen felony charges, with possible jail sentence of 50 years
  - JSTOR backed down
  - MIT did not

# What happened to Swartz?

- Swartz commits suicide
- News about his death is widely spread

# Many policy questions

- What does a violation of “terms of service” mean?
  - How should it be prosecuted?
  - Should it be a “catch-all” for computer crimes/violations not covered by anything else?

## Policy questions - 2

- The punishment for violations of “terms of service” typically depends on how much damage was done. How can we reasonably assess the amount of damage?

## Policy questions - 3

- It has been said that violators of “terms of service” are most frequently treated as low level drug-dealers (in terms of how long their sentence will be, and whether they’ ll be treated as felons). Are there other types of criminals/criminal actions that would be more appropriate to consider when thinking how to punish these violators?

# Policy questions - 4

- What sorts of laws should exist for computer-based crimes that don't?
  - For example, is cyber-stalking or cyber-bullying different from stalking or bullying?
- Is there a policy vacuum generally with respect to online criminal conduct?
  - If yes, in which areas is it most acute?



# Policy questions - 5

- Swartz was viewed as an activist. And activists are often punished for their violations of law
  - Why should/should not Swartz have been treated differently than other activists?

# Ethical considerations

- How might we consider Swartz' s actions from an act- or rule-utilitarian perspective? From a deontological perspective?
- Is there a way to relate the relative “rightness” or “wrongness” of his action to help inform what a reasonably punishment should be?

# Finally...

- Reviewing the course

# Goals of the Course

1. **Ethics Matters:** To encourage you to take ethics and social responsibility seriously—these issues are integral aspects of your technical work and not irrelevant concerns better relegated to those in the “fuzzy” disciplines.
2. **Frameworks:** To provide you with analytical tools from classical and applied ethics to help you understand ethical questions that arise in the discipline of computer science.
3. **Policy:** To introduce various social policy questions raised by modern computing
4. **Writing:** To offer an opportunity to improve your writing skills

# What Makes Computing Different?

- Computing is used to solve hard problems.
- The discipline of software engineering has not had centuries in which to mature.
- Software has high “system complexity” and is therefore difficult to distribute among members of a large team.
- Bugs are ubiquitous and inevitable.
- Software systems are discrete rather than continuous: it is impossible to “overengineer” such systems.
- Software systems are inherently chaotic: small changes in initial conditions generate massive changes in results.
- The economics of software systems means that even flawed products can have tremendous economic value.

That's all