Announcements 3/29

• **Op-Ed Finals due TODAY.** Put hardcopy (marked up AND revised) on Fran’s desk at the beginning of class.

• No class Wednesday, April 3

• **Briefings due April 5**

• **Office hours April 5 at a non-standard time:** 2:30-3:30
<table>
<thead>
<tr>
<th>Wednesday Section</th>
<th>Friday Lecture (first half)</th>
<th>Second half of class</th>
<th>Assts.</th>
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<tbody>
<tr>
<td>January 9: NO CLASS</td>
<td>January 11: INTRO – DATA AND SOCIETY</td>
<td>Fran presentation demo</td>
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<td>January 16: NO CLASS</td>
<td>January 18: BIG DATA 1; Topic groups / Topic materials information</td>
<td>Student presentations</td>
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<td>January 23: Student presentations</td>
<td>January 25: BIG DATA 2</td>
<td>Student presentations</td>
<td>Op-Ed instructions</td>
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<td>January 30: NO CLASS</td>
<td>February 1: DATA AND SCIENCE</td>
<td>Student presentations</td>
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<tr>
<td>February 6: NO CLASS</td>
<td>February 8: DATA STEWARDSHIP AND PRESERVATION</td>
<td>Student presentations</td>
<td>Group Topics due</td>
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<td>February 13: NO CLASS</td>
<td>February 15: INTERNET OF THINGS</td>
<td>Student presentations</td>
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<tr>
<td>February 20: Student presentations</td>
<td>February 22: DATA AND PRIVACY / FOUNDATIONS</td>
<td>Student presentations</td>
<td>Op-Ed Drafts due</td>
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<td>February 27: NO CLASS</td>
<td>March 1: DATA AND PRIVACY / POLICY AND REGULATION</td>
<td>Student presentations</td>
<td>Briefing instructions Op-Ed Drafts Returned</td>
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<td>March 6: Spring Break</td>
<td>March 8: Spring Break</td>
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<tr>
<td>March 13: Student presentations</td>
<td>March 15: DATA AND ENTERTAINMENT [ANDY MALTZ]</td>
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<td>Topic Reports 1 due</td>
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<td>March 20: TOPICS PRESENTATIONS 1</td>
<td>March 22: DATA AND DATING</td>
<td>Student presentations</td>
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<td>March 27: Student presentations</td>
<td>March 29: DIGITAL RIGHTS 1</td>
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<td>Op-Ed Finals due</td>
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<td>April 3: NO CLASS</td>
<td>April 5: DIGITAL RIGHTS 2</td>
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<td>Briefings due</td>
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<td>April 10: Student presentations</td>
<td>April 12: DATA AND ETHICS</td>
<td>Student presentations</td>
<td>Op-Ed Finals returned, Topic Reports 2, 3 due</td>
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<td>April 17: TOPICS PRESENTATIONS 2</td>
<td>April 19: CAREERS IN TECH [KATHY PHAM]</td>
<td>Student presentations (5)</td>
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<tr>
<td>April 24: Student presentations (5)</td>
<td>April 26: TOPICS PRESENTATIONS 3</td>
<td>Student presentations (2)</td>
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Digital Rights 1

- Copyright
  - U.S. Copyright law
  - DMCA
  - Creative Commons

- Next time: Informed Consent -- Data Rights in Research and the Public Sector
What is copyright?

- *Wikipedia*: “Copyright is a *legal right* created by the law of a country that *grants the creator of an original work exclusive rights to its use and distribution, usually for a limited time*, with the intention of enabling the creator to receive *compensation* for their intellectual effort.

- The exclusive rights are, however, *not absolute* and *do not give the creator total control* of their works because they are limited by limitations and exceptions to the copyright law.”

- *Copyright came about with the invention of the printing press* and wider literacy. Its legal origins were in Britain at the beginning of the 18th century.
What is copyright?

• **Copyright is a form of intellectual property.**
  – Can be shared among multiple authors, each of whom holds a set of rights to use or license the work.
  – “Rights” include reproduction, control over derivative works, distribution, public performance, and “moral rights” (e.g. attribution)

• **U.S. Constitution provides for the protection of copyrights** “to promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries” (1787)
  – Modern intent of copyright is to promote the creation of new works by giving authors control of and profit from them

• **Copyrights are “territorial”** – do not extend beyond the territory of a specific jurisdiction unless that jurisdiction is party to an international agreement
  – Many aspects of copyright standardized internationally but each country’s copyright laws have unique features

• **Once copyright expires, the work enters the public domain** and can be freely used or exploited by anyone.
Copyright in the U.S. and around the world

- For most of the world, the duration of copyright generally the whole life of the creator + 50-70 years from the creator’s death (or a finite period for anonymous or corporate creations)
  - Original length of copyright in U.S. was 14 years and it had to be explicitly applied for. Afterwards, work was in the public domain

- Some jurisdictions have required formalities to establishing copyright, most recognize copyright in any completed work without formal registration.

- Copyright covers form and manner that ideas are expressed but not the ideas themselves.
  - E.g.: Copyright of Mickey Mouse cartoon restricts others from making copies of the cartoon or creating derivative works of MM. MM is not copyrighted because characters cannot be copyrighted.
  - Patents and trademarks used in areas that copyright doesn’t cover

- 1989 Berne Convention Implementation Act amended U.S. 1976 Copyright Act to conform to most of the provisions of the Berne Convention
  - Berne Convention provides for recognition of copyright among sovereign nations, rather than bilaterally
  - Copyright is automatic and does not require registration. Foreign authors treated equivalently to domestic authors in any country signed onto the Convention
“Happy Birthday” song copyright

- Specific piano arrangements and unused second verse of Happy Birthday Song copyright registered by Summy Company in 1935.
  - Song is believed to have been authored to Patty and Mildred Hill in 1893 (claim has been disputed). Copyright focused on work for hire performance by Orem and Forem.

- Copyright registered by Summy Company in 1935. In 1988, Warner/Chappell Music purchased the company owning the copyright for $25M.
  - Warner/Chappell Music charged for royalties in public performances, claimed that copyright doesn’t expire until 2030.
  - Copyright expired in EU in 2017 (70 years after Patty Hill’s death)

- In 2015/2016, federal judge declared that Warner/copyright claim was invalid (copyright covered specific piano arrangement and not lyrics and melody). No other copyright claims were outstanding. Warner/Chappell paid $14M to those who had licensed the song and Happy Birthday declared in the public domain.

Fair Use (in the U.S.)

• Wikipedia: Fair use is a limitation and exception to the exclusive right granted by copyright law to the author of a creative work.
  – Fair use permits limited use of copyrighted material without acquiring permission from the rights holders.

• Fair use is one of the traditional safety valves intended to balance the public's interest in open access with the property interests of copyright holders.

• Fair use of a copyrighted work for purposes such as criticism, comment, news reporting, teaching, scholarship, or research, is not an infringement of copyright.

• In determining whether the use made of a work in any particular case is a fair use the factors to be considered shall include:
  – the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes;
  – the nature of the copyrighted work;
  – the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and
  – the effect of the use upon the potential market for or value of the copyrighted work.
Copyright infringement / piracy
Copyright infringement: use of works protected by copyright without permission

- Copyright infringement disputes are usually resolved through **direct negotiation**, a **notice and take down** process or **litigation**.
  
  - Egregious or large scale commercial infringement sometimes prosecuted via the criminal judgement system

- Infringement often targets violation of exclusive rights of copyright owners including reproduction, preparation of derivative works, distributing copies for sale or rental, and public performance or display.

- Punishment of copyright infringement varies. Convictions may include jail time or fines.
Copyright Infringement – Political Campaigns

Candidates may be subject to lawsuits when they play music without copyright permission

Groups objecting to candidates using their music: (excerpt from https://fivethirtyeight.com/datalab/the-long-history-of-musicians-telling-republicans-to-stop-playing-their-music/)

- Reagan also got dinged in 1984 by John Cougar Mellencamp for “Pink Houses.”
- Springsteen objected to Dole using “Born in the U.S.A.” in 1996.
- John Hall of the band Orleans objected to Bush using the song “Still the One” during his re-election campaign in 2004.
- The Foo Fighters stopped McCain from playing “My Hero.”
- Sam Moore of Sam & Dave objected to Barack Obama using “Hold On, I’m Coming” during the 2008 election.
- Survivor objected to Newt Gingrich using the song “Eye of the Tiger” in 2012.
- Survivor objected to Romney using “Eye of the Tiger.”
- Katrina and the Waves objected to Michele Bachmann playing “Walking on Sunshine.”
- Neil Young complained bout Donald Trump’s use of “Rockin’ in the Free World.”
- Etc., etc.,

“If the campaign wants to use a song as its theme, they should contact the management for the artists and/or songwriters of the song in question and obtain their permission.” [ASCAP]  

“Stairway to Heaven” copyright infringement case – Did Led Zeppelin plagiarize Spirit?

- Lawsuit brought by Michael Skidmore, Trustee for “Randy California” in Spirit and composer of “Taurus” in the late 1960’s.

- Complaint was that “Stairway to Heaven” plagiarized “Taurus” and infringed copyright.

- “Taurus” released by Spirit 1967-1968. Led Zeppelin released “Stairway to Heaven” in 1971. Groups had crossed paths and shared bills but it was not proven that Led Zeppelin had listened to “Taurus”.

- Suit filed by Michael Skidmore (heir to Randy California’s intellectual property) in 2014.

https://www.indeepmusicarchive.net/2015/06/5615-spirit-taurus-1968/
Was it plagiarism?

• Recordings:

• A musician’s take:
  • [https://news.avclub.com/a-guitarist-on-whether-stairway-to-heaven-really-rips-1798248408](https://news.avclub.com/a-guitarist-on-whether-stairway-to-heaven-really-rips-1798248408)
“Stairway to Heaven” Legal Timeline

• In June 2016, Led Zeppelin prevailed at trial after discussion of similarity between the songs.
  – Jury didn’t hear the recording of “Taurus” because the song was copyrighted before sound recordings were covered by federal law. Jury had to rely on 1967 “deposit copy”. Sound recording not protected, but could have been useful for jury.

• Jury determined that songs were not substantially similar under the extrinsic test. Led Zeppelin won.

• In September 2018, 9th Circuit court of Appeals partially vacated the trial court’s judgement in favor of Led Zeppelin and remanded the case for a new trial. Issue was that jury was improperly instructed about unprotect-able music elements and improperly instructed on originality.

• What’s protected and what’s not?
  – Notes are unprotected
  – Chromatic scales, arpeggios, short sequences of 3 notes not protected.
  – Arrangements are protected

• “Substantial similarity” and the “extrinsic test”
  – Substantial similarity – similarity between works that can serve as a measure of copyright infringement
  – Extrinsic test – objective test of similarity
  – Using expert analysis and law to break works down to their constituent elements, and compare those elements


Fran Berman, Data and Society, CSCI 4370/6370
Copyright and digital content -- 1998 Digital Millennium Copyright Act (DMCA)

• DMCA is U.S. copyright law that implements two 1996 treaties of the World Intellectual Property Organization (WIPO).

• DMCA
  – Criminalizes production and dissemination of technology, devices or services intended to circumvent digital rights management (DRM) measures that control access to copyrighted works.
  – Criminalizes the act of circumventing an access control (even if there is no infringement of the copyright itself)
  – Heheightens penalties for copyright infringement on the Internet.

• DMCA amended Title 17 of the U.S. code to extend the reach of copyright while limiting the liability of online service providers and other intermediaries for copyright infringement by their users
DMCA Provisions

Provisions of the DMCA

• **No circumventing digital protections**: A ban on circumventing a technological measure or access control technology.

• **No distribution of devices designed to circumvent digital protections**: A ban on trafficking in technology that circumvents access-control measures.

• **No selling of anti-security tools**: A ban on trafficking in technology that circumvents technological protection measures that restrict the ability to copy a copyrighted work.

• **No removing copyright information**: A ban on the alteration of copyright management information.

• **Safe harbor for Internet service providers**: A system for which Internet Service Providers (ISPs) can escape liability for vicarious or contributory copyright infringement.
Why does Bruce dislike the DMCA?

• DMCA blocks efforts of security researchers to find vulnerabilities and improve security.
  – Prohibition against circumventing product features intended to deter unauthorized reproduction of copyrighted works prevents security researchers from reverse engineering, locating and publishing vulnerabilities in SW systems that protect copyright.
  – Ineffective in preventing professional digital piracy; constrains security efforts.

• 2016 exemption for security researchers from Library of Congress narrow and still temporary, leaving room for harassment of researchers.
DMCA copyright Infringement: Viacom v. YouTube, Google Inc.

• March 13, 2007: Viacom filed a lawsuit against YouTube and its corporate parent Google for copyright infringement, seeking $1B in damages.

• Viacom (owner of Paramount, Dreamworks, some cable channels) claimed that YouTube was engaging in “massive intentional copyright infringement” for making available 160,000 unauthorized clips of Viacom’s entertainment program.
  
  — Viacom: “YouTube appropriates the value of creative content on a massive scale for YouTube's benefit without payment or license.”

• Google claimed that the DMCA’s safe harbor provision shielded them from liability.
Different perspectives

- **Viacom**: "YouTube has deliberately chosen not to take reasonable precautions to deter the rampant infringement on its site," ... "Because YouTube directly profits from the availability of popular infringing works on its site, it has decided to shift the burden entirely onto copyright owners to monitor the YouTube site on a daily or hourly basis to detect infringing videos."

- **Viacom source**: "More and more of the company's resources are going to this," the source said. "The company basically is paying for an entire new department to watch YouTube."

- **Google**: Google relying on 1998 DMCA to shield the company from liability. One provision of that statute generally says **companies are off the hook if they remove copyrighted content promptly** when it is brought to their attention.

- **Google**: Internet services benefit from "safe harbor" if they also meet a four-pronged test. Conditions include not being "aware of facts or circumstances from which infringing activity is apparent" and not receiving "financial benefit directly attributable to the infringing activity."

- Counsel for **YouTube / Google** confident their actions were on solid legal ground. "We meet those requirements and go above and beyond them in helping content providers identify copyright infringements."
Legal trajectory

- Case originally filed in March, 2007 in the District Court for the Southern District of New York.


- On April 5, 2012, the federal Second Circuit Court of Appeals vacated Judge Louis Stanton's ruling, and instead ruled that Viacom had presented enough evidence against YouTube to warrant a trial, and the case should not have been thrown out in summary judgement.

- Court did uphold the ruling that YouTube could not be held liable based on "general knowledge" that users on its site were infringing copyright.

- Case was sent back to the District Court in New York

- On April 18, 2013, Judge Stanton issued another order granting summary judgment in favor of YouTube.

- Case is now over; no money changed hands.

Fran Berman, Data and Society, CSCI 4370/6370
Fixing the all/nothing character of copyright -- Creative Commons (CC)

- Wikipedia: “Creative Commons (CC) is a non-profit organization devoted to expanding the range of creative works available for others to build upon legally and to share.”

- CC copyright-licenses free of charge to the public. The licenses allow creators to communicate which rights they reserve, and which rights they waive for the benefit of recipients or other creators.

- CC replaces "all rights reserved" copyright management, with a "some rights reserved" management employing standardized licenses for re-use cases where no commercial compensation is sought by the copyright owner.

Image by Creative Commons (http://creativecommons.org/about/press/) [Public domain], via Wikimedia Commons, Material summarized from Wikipedia

Fran Berman, Data and Society, CSCI 4370/6370
Creative Commons

• Creative Commons provides an agile, low-overhead and low-cost copyright-management regime, profiting both copyright owners and licensees.

• **What is Creative Commons and what do you do?** (from https://creativecommons.org/faq/#what-is-creative-commons-and-what-do-you-do)
  – “Creative Commons is a global nonprofit organization that enables sharing and reuse of creativity and knowledge through the provision of free legal tools. Our legal tools help those who want to encourage reuse of their works by offering them for use under generous, standardized terms; those who want to make creative uses of works; and those who want to benefit from this symbiosis. Our vision is to help others realize the full potential of the internet. CC has affiliates **all over the world** who help ensure our licenses work internationally and who raise awareness of our work.

  – Although Creative Commons is best known for its licenses, our work extends beyond just providing copyright licenses. CC offers other legal and technical tools that also facilitate sharing and discovery of creative works, such as **CC0**, a public domain dedication for rights holders who wish to put their work into the public domain before the expiration of copyright, and the **Public Domain Mark**, a tool for marking a work that is in the worldwide public domain. Creative Commons licenses and tools were designed specifically to work with the web, which makes content that is offered under their terms easy to search for, discover, and use.”
CC licenses

https://creativecommons.org/about/videos/creativecommons-kiwi/

• Six regularly used licenses:

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<th>Icon</th>
<th>Description</th>
<th>Acronym</th>
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A free cultural work is one which has no significant legal restriction on people's freedom:
• to use the content and benefit from using it,
• to study the content and apply what is learned,
• to make and distribute copies of the content,
• to change and improve the content and distribute these derivative work

Similar to “open content”

Table from Wikipedia, http://en.wikipedia.org/wiki/Creative_Commons_license
Lecture 10 Sources (not already on slides)

- **Bruce Schneier**, Click here to kill everybody, https://books.wwnorton.com/books/Click-Here-to-Kill-Everybody/
- “**Unintended Consequences – Twelve years under the DMCA**” Electronic Frontier Foundation, https://www.eff.org/wp/unintended-consequences-under-dmca
- “**Stairway to the 9th Circuit and Back**”, http://www.kaufmankahn.com/stairway-ninth-circuit/
- **Creative Commons website**, http://creativecommons.org/
- **Wikipedia** entries on *Happy Birthday*, copyright infringement, copyright, fair use, digital millennium copyright act, Creative Commons, Creative Commons licenses
Break
Presentations
April 5


April 10


April 12


• “Can we teach machines moral behavior? Three perspectives on ethics for artificial intelligence”, Medium, https://medium.com/@drpolonski/can-we-teach-morality-to-machines-three-perspectives-on-ethics-for-artificial-intelligence-64fe479e25d3 [Jacob S]

Today


• “What is blockchain and how can the entertainment industry use it?”, Forbes, [https://www.forbes.com/sites/legalentertainment/2019/03/01/what-is-blockchain-technology-and-how-can-the-entertainment-industry-use-it/#490b6aae4a47](https://www.forbes.com/sites/legalentertainment/2019/03/01/what-is-blockchain-technology-and-how-can-the-entertainment-industry-use-it/#490b6aae4a47)
